ALBERT LEGAULT

THE END OF A MILITARY CENTURY?

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Preface

The End of a Military Century? was originally written at the end of 1989 and the beginning of 1990 but has since been updated to include the most significant changes within the context of East–West relations. Thus, it largely predates the dismembering of the former USSR and before the United Nations assumed an increasing role in the resolution of internal conflicts — such as in Yugoslavia and Cambodia. However, these events simply reinforce, if it were need, the validity of the "peace through right" model, whose historical origins I have tried to outline in this study.

There is simply no alternative to "order" except "anarchy," and the cost of war has become suicidal and unaffordable even for the mightiest nations. The Gulf War has been priced well above $60 billion: of which, $54 billion was paid by foreign nations.

If there is one essential lesson that the countries of the South must learn from East–West opposition, it is the futility of relying only on military spending to change an adversarial political situation into a partnership of dependent cooperation. Other priorities are also apparent, such as the need to uphold international institutions and law, to protect the environment, and to maintain the struggle against drug trafficking and terrorism.

It would be naive to assume that the lesson will be quickly learned by potential aggressors, however. Until it is, the industrialized countries of the North must counter continued efforts on the part of developing countries of the South to overcome perceived grievances through military means, including terrorism. Terrorism and that other antisocial behaviour, narcotics trafficking, are symptoms of deep social malaise — primarily poverty and injustice —

that form ready platforms for criminals as well as activists. Social injustice and disparities of wealth and power must be the targets of those seeking peace; in that struggle, military techniques are an ineffective weapon in the arsenal required. The arms race is not cost effective in gaining the goals of peace and international stability. A new conscience is perhaps slowly emerging in the North. It is to be hoped that the message will also be heard in the South.

For reasons of space, only one appendix — on the military expenditures of countries — is published in full in this book. In all other cases, numbered supplements are referred to: these are available on request in disk form (Macintosh disk and MicroExcel program) from the Strategic Studies Program, Quebec Centre for International Relations, Faculty of Social Sciences, University of Laval, Quebec, PQ, Canada, G1K 7P4.

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Albert Legault
Quebec
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The End of a Military Century?

Chapter 1
Three Principal Models of International Relations

Crises in international relations[1] and in strategic studies[2] are forcing us to pose new questions on the issues of international peace and security. In addition, Gorbachev's rise to power and his subsequent demise, as well as the breakdown of the Soviet empire, altered the fundamental dynamics of East–West relations. After almost 45 years of the arms race between the two major ideological camps, one of which defended democratic values, the other, the benefits of a socialist system, and after a troubled period of rapid decolonization and an unprecedented increase in regional conflicts throughout the world, observers are finally becoming aware of new problems.

Today, pollution, the environment, the possible proliferation of nuclear and chemical weapons and of the technology behind these weapons, terrorism and the deterioration of the social environment from drug abuse, and the ever-increasing effort required to combat AIDS (acquired immune deficiency syndrome) and other sexually transmitted diseases are among the major problems. The title of a work by Edgar Morin, *Pour sortir du 20e siècle* (Leaving the 20th Century) indicates well the dilemma that 21st-century mankind will have to face (Morin 1981). If the world's nations and leaders do not change their attitudes and perceptions, if the foresight needed to establish a rational system for managing our economic resources cannot be found, the world risks collapsing into total chaos.

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1 Title of a special issue of *Études internationales* (vol. 15, no. 4, December 1984) published by the Centre québécois de relations internationales.

2 See special issue entitled *Les études stratégiques : où en sommes-nous* of *Études internationales* (vol. 20, no. 3, September 1989).

In a recent work, Barry Buzan (1983) provided a short but penetrating description of the differences between the two basic approaches to international relations theory:

> *Because realist policies require the arming of the state and a power-struggle analysis of the system, they naturally clash with idealist policies based on disarmament, international cooperation, and a harmony-of-interests model of the system. If that clash is seen as so basic that it precludes a meaningful mix between them, then each alternative must carry alone the whole burden of security. To do this the realist policy must exaggerate the necessity for a powerful state, and the idealist one must leap all the way into utopias of general and complete disarmament and world government.*

Better than anyone else, Buzan has defined the two extremes illustrated by what we have called the schools of "peace by might" and "peace by right" (Legault and Fortmann 1989). Although they have traditionally always been treated as approximately concurrent phenomena, the two schools of thought have different historical roots. One is actually more recent than the other. "Peace by right" has its origins in the Judeo–Christian tradition of social justice; that is, in the desire for equality among the members of a given society, and in the will to solve conflicts peacefully. Several authors credit Erasmus with the concept of pacifism (in this regard, see the remarkable work of Barrea 1986); in 1517, he called on his fellows to "conspire of a common accord, and with all our strength, against war." The origins of "peace by right" can also be seen in the legal positivism and plans for eternal peace of Crucé (Émeric de Lacroix, known as Crucé, wrote his memoirs in 1638), Sully (advisor to Henry IV of France), Abbé de Saint-Pierre (in 1712–1713, he developed a plan for eternal peace in Europe), and Immanuel Kant (he drew up his famous plan for eternal peace in 1795). Today, this doctrine is advocated by the school of peace through world government. The major international conferences in The Hague at the end of the last century, the League of Nations, and the United Nations (UN) were

all the result of institutional[3] and legal positivist trends aimed at regulating international relations.

The "peace by might" school, on the other hand, came out of scientific positivism and the Industrial Revolution, both of which made possible mass conscription and a logistical organization compatible with the maneuvers and firepower of a modern army. Modern strategy is based on the same premises of scientific positivism as operational research, game theory and the calculation of probabilities constitute its very foundations, while the "technetronic era," to use an expression much favoured by Zbigniew Brzezinski, the former national security advisor to former president Jimmy Carter, is another industrial revolution of the developed world.

Politically, integration theories and the analysis of international institutions were the result of the functionalism that appeared between the two world wars. Major areas of cooperation had to be kept sheltered from the political–strategic opposition between the two blocs, where harmony of interests — the functional approach — could eventually guide the states to base their policies on non-zero-sum games, with each reaping a legitimate advantage from its association with the other. The theories of the "realist" school were born from the disillusionment of the Cold War, the disenchantment with certain international institutions, especially the UN, which was made to look ridiculous by the successive vetoes of the USSR, and the disorder resulting from the violent clash of the two ideologies, both of which wanted to emerge sole victor.

Throughout history, the polarization of a political system has always led the protagonists into endless conflict, with excluded third parties most often being reduced to playing the role of simple observers or pawns in a game of international chess. The balance-of-power theory, of which Richelieu, Frederick the Great, and Bismarck were in their times both great masters and disciples, was replaced, after World War II, by the so-called balance-of-terror

[3] "To the apolitical pacifism of the Anabaptists Mennonites and the revolutionary tendencies of the millennium movement of the 16th century, Crucé would be the first to propose a committed, political, institutional pacifism that was reformist on an international scale and, therefore, termed *utopic*." (Barrea 1986: 138. [unofficial translation]).

theory, by which the two superpowers controlled the right to life and death on the planet. This was largely attributable to rapid developments in technology and to a new branch of international politics now known as "strategy." This term, which was originally applied solely to the nuclear arena, is now so widely used that it is impossible to say what it really means; however, it includes studying the role of force in international relations.

Nuclear strategy is basically the result of the technological luxury that nations acquired in their race for strategic superiority. The "hard" sciences (atomic, thermonuclear, ballistic, propulsion, and guidance systems) and the major schools of thought, such as that espoused by the Rand Corporation, were fascinated by the rapid evolution of technology that made the development of strategic studies possible. The social sciences and psychology only later became interested in studying conflict relationships from a sociological or behavioural point of view, particularly in terms of behaviourism and the quantitative study of conflicts.[4]

The countries in which this phenomenon was occurring were precisely those that, because of their resources and needs, shaped an entire generation of strategists who then set out to maximize the well-being of or the benefits to their respective countries. They attempted to discover the secrets and conditions that, one way or another, could either stabilize the nuclear balance between the superpowers or cause dangerous imbalances in the race for technological superiority. The most serious of the strategists, people such as Brennan, Halperin, and Bull, undertook arms control, that is, everything that could help limit destruction if the system of nuclear deterrence failed. Whether one likes it or not, strategy was used by the state mainly because in this area it had complete control. It is not surprising that, under these conditions, strategists were nationalists at heart, concerned mainly with maximizing benefits for their all-powerful Leviathan.

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[4] It is true that Quincy Wright and Lewis Richardson were the great precursors of sociological studies on war and peace, even before Bernard Brodie published his book *The Absolute Weapon* (1946), but the study of nuclear strategy will, for all practical purposes and for many years, overshadow the study of conflicts in courses offered at large American universities.

At the same time, the school of functionalism, integration, and the regulation of conflicts by means of institutions suffered setback after setback, partly because of the Cold War that plunged the UN into a series of crises from the Congo, through the "tyrannical majority" to bankruptcy, partly because of the general rise in conflicts in the Third World, but also and especially because the internationalist cause, which wanted to maximize benefits for the international community, failed to find support.

The main characteristics of the two schools of thought are summarized in Table 1, as well as the search for peace through "transsystemic" objectives,[5] or what the young pacifist school of the 1960s called "superordinate" objectives. This school of thought may reflect ancient oriental philosophies such as Taoism, or the need for individual development in harmony with the laws of nature and the universe. The modern origins of this approach can be found in the contemporary emphasis on ecology. However, at a deeper level, it is the result of individual disenchantment with the pseudoprogress of technological and industrial development that, from Hiroshima to Chernobyl, has caused so many problems for civilizations that claim or wish to be highly developed. The price for such technology today is too high to pay. The vision of a shared planet is the basis for this school of thought and the concept of "scientific progress" is questioned more often than not. In the military sphere, this model is associated with the idea of "common security," a concept difficult to define, and, in the economic sphere, with the Brundtland Report (Brundtland and Khalid 1987) and concepts related to "sustainable development."

This third model is not merely a synthesis of the two models that have dominated major historical developments. From Utopia to the noble ideals of world government, from the controlled application of force practiced by Bismarck to the enormous human disasters represented by the two world wars, there have been variations in both of these two approaches. They have never coexisted in

[5] The prefix "trans" is used here as meaning "through," as in transparent, and not as meaning "beyond," as in "transalpine".

Table 1. Main characteristics of schools of thought in international relations.[a]

School of thought	Origin	Method of analysis	Results	Ultimate goal
Peace by Might	Scientific positivism Industrial revolution	Operational research and other decision-making aids	Strategic studies	Maximize benefits for country or unit in question
Peace by Right	Social justice Peaceful settlement of disputes	Functionalism, neofunctionalism, and integration theories	Studies on law and international institutions	Maximize benefits for the group
Transsystemic Peace[b]	New value system Questioning of "scientific progress"	Alliance of "hard" and "soft" sciences	Environmental research	Maximize chances for survival of the planet

[a] The first two sections of this table are from Legault and Fortmann (1989: 407).
[b] Peace through the pursuit of transsystemic objectives.

their pure forms, as both have risen and fallen in favour, as history has witnessed. The "transsystemic" approach is new in that it expands human consciousness. This is something that Maritain and others were already predicting more than 50 years ago, and that Fritjof Capra with his bestseller, *The Tao of Physics* (1979), as well as *Uncommon Wisdom* (1988), was able to popularize. However, clearly the ultimate goal of this third school is to maximize survival chances for the planet. There is a desire for renewed international cooperation based on the concepts of social justice and harmonious worldwide development that takes into account the needs of the individual as well as the environment. In addition to these ethical considerations, there is a global awareness of the common destiny of humanity. Whether one likes it or not, the concepts of "scientific progress" and "secular thinking" are called into question by a code of ethics that purports to be more universal.

This is where an alliance between the two older models comes into play. The "hard" sciences and the "soft" sciences, or social sciences, must work together. Strategy, law, institutional regulations, and national, transnational, and international cooperation can and must interact positively if we are to begin to find a solution to the urgent problems facing our planet. No one is naive enough, however, to believe that the third model will make the first two disappear. On the contrary, the first, in particular, will probably continue to exist. To achieve the aims of the third model, the most destructive effects of the first would have to be limited, and the second and third approaches encouraged as much as possible.

This model also advocates a change in the ethical debate: it would no longer be focused on the two extremes of nationalism and internationalism, to which history has long accustomed us. The argument would be raised to the "transsystemic" peace level; strategists, jurists, philosophers, politicians, and ecologists would all try to maximize the possibilities for the planet's survival.

In contrast to the first model, in which politics makes science its slave to ensure its own economic, technical, and strategic superiority, in the third model the sciences would exercise control over political goals, to give them the global or

"transsystemic" meaning they have never had in the past. In fact, it raises once again the age-old question of the relationship between science and society, both of which are responsible for the consequences of their actions and behaviour.[6] Research on peace would gain acceptance if politicians understood the meaning of history and accepted their responsibilities; if they see the basic necessity for an interdisciplinary viewpoint to discuss the individual and the environment.

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6 We do not have enough room here to discuss the epistemological issues related to the various theories on international relations. Specialists tend to present the "global approach," "dependence theories," and explanations according to the "international capitalist system" as constituting a separate school of international relations. In the view of these same specialists, socioeconomic disparities and dependency situations are more important than the "billiard ball" model, in which the nation-state and the anarchical structure of the international system are the main variables in any explanation of the behaviour of nations. In this regard, see Korany (1984) and Viotti and Kauppi (1987, especially chapter 4). This view is really a more elaborate form of structural functionalism, but is not restricted to that school of thought. While we are prepared to accept the underlying premises of this view, we do not feel it constitutes a separate entity. Structural functionalism is possible within all other approaches. This is the main reason we prefer to base our discussion on the three schools of thought given above, as all three involve a debate on different political aims and thus different values. What we are concerned with here are value systems. As regards the epistemological and philosophical issues related to value systems, we refer the reader to a short simple work by Popper (1981).

Chapter 2
The Gulf Crisis: Should the Three Models be Revised?

The occurrence of the Gulf Crisis confirmed the relevance of the three models developed in the previous chapter. Before we discuss it in more detail, it may be useful to recall the indecisiveness inherent in diplomatic and strategic leadership, a key concept in the philosophy of history as developed by Raymond Aron (1962).

On the philosophical plane, nobody can claim to know what would have happened or what the international system would have been today if World War I or II had not occurred. In the same way, before the start of hostilities in the Gulf, the observer could only draw one simple conclusion: with or without a war in the Gulf, the situation was, or was becoming, untenable.

In other words, between action and inaction, there was a considerable margin for value judgments. Hard-liners believed that all mediation formulas had been exhausted and that the ultimatum of 15 January 1991 was the last stage in a long process that would not have occurred except for Iraq's intransigence. Believers in "peace by right" stressed that sanctions would need more time to take effect, and that any kind of peace, even an unsatisfactory one, was preferable to a war.[1] In philosophical terms, the question inevitably became: was Saddam Hussein preferable to war or would millions of Kurdish refugees be preferable to the prewar situation that still existed in January 1991? If the war did not occur, could this

[1] Although some considered the peaceful settlement of differences as a normative value, this is nevertheless written in all constitutional charters of international organizations. The basic differences between Chapters VI and VII of the UN Charter illustrate clearly the crucial dilemma that put believers in "peace by right" against believers of "peace by might" in the Gulf Crisis.

mean that Saddam Hussein would profit by developing his military power further so that, one day, he could finally cross swords with Israel?

All these questions clearly remain and although commentators have answered them differently, they all invoked the judgment of history to justify their opinions. However, any judgment of history is only the one you choose to see. Militarily, the situation is probably less dangerous today than it was formerly, but on the level of human suffering, it is probably just as or more unacceptable than it was before the war. The question now is about the duty to assist displaced persons, including millions of Kurdish refugees who are deprived of basic food and housing needs.

In the three models, the debate is as outlined. To the "peace by might" school, the Gulf War is largely the political product of countries that profited from the Iran–Iraq War by shamelessly rearming Iraq,[2] just as the USA, a decade earlier, had made itself the champion of regional stability and balance between Iran and Saudi Arabia. What happened to Iran in the early 1980s is common knowledge. The post-Gulf situation is not without its contradictions, because the USA has a contract to rearm Saudi Arabia for US$23 billion (Klare 1991a) while still insisting on the principle that the Gulf States must not be rearmed, as happened throughout the 1980s with well-known results. Considerable tensions thus exist within the same model: that is, between the strategic need for balance and the pressing need for arms control in the region.

In the area of law and peaceful regulation of differences, current diplomatic schemes to call some type of regional, multilateral, or international conference on the Middle East indicate the beginning of a dialogue on the current dramatic problems. Several solutions are being considered: the exchange of land for peace; confidence-building measures and regional stability through the introduction of demilitarized zones, possibly monitored by international supervisory forces; increased control in the area of nonproliferation

[2] Not so very long ago, a French newspaper headline read: "*L'Occident à l'assaut de sa créature*" (The West is attacking its own creation).

of nuclear, biological, and chemical weapons; and more severe restrictions on high-technology transfers. Only time will tell if these efforts are successful. In the meantime, it must be acknowledged that simply transferring the lessons of the Cold War to this region will not be enough to ensure peace and international security. That will only come from the democratization of most of these regimes, too long closed in on themselves, and especially from an improved distribution of the region's resources between rich and poor countries. Only when the countries of the region have understood the need to improve the distribution of resources and to maintain security with a minimum of military strength does the second model have a chance to influence the region, at the expense of the first.

Nobody can claim that the third model played a role in the military operations of the Gulf War. In fact, one state burned and sacked another, using a "scorched-earth" policy effectively aimed at preventing Kuwait from undertaking any economic reconstruction for a long time. Probably these were short-sighted calculations and Kuwait, thanks to its financial resources, will succeed in limiting the ecological disaster that is already being felt in other regions of the world. In this situation, the "transsystemic" model would encourage concentrating on various regional hydroelectric projects rather than the disastrous effects of the Aswan Dam on the region or the possible diversion of the water course of some rivers rising in Turkey, essential for the irrigation of Syria and Iraq.

Seen after the fact, it is not clear if the perspective of a new world order, so desirable on the eve of the Gulf conflict, is any closer to us now than it was 1 year ago. Arms are again being delivered to the region, several countries are still suspected of secretly manufacturing chemical[3] or biological weapons, military budgets show no sign of decreasing, the internal military production of countries such as Israel is, to a large part, intended for export, and the

[3] According to a report by the American Marine Information Services (*Statement of Rear Admiral Thomas A. Brooks, USN, Director of Naval Intelligence before the Seapower, Strategic and Critical Materials Subcommittee of the House Armed Services Committee on Intelligence Issues* (7 March 1991)), six Arab countries (Egypt, Iran, Iraq, Israel, Libya, and Syria) have an offensive chemical capacity, while Saudi Arabia may also have a similar capacity.

Palestinian issue appears to remain as insoluble as before, even if the leader of the Palestine Liberation Organization (PLO) emerged from the Gulf Crisis discredited.

On the other hand, some progress can be noted for the second model. Iraq's acceptance of Resolution 687 of the UN Security Council will be a crucial test for this organization, with regard to the controls and monitoring measures to prevent the proliferation of large-scale destructive arms in the region. Furthermore, the international community as well as the European Community claim that they have an increased "duty to interfere"[4] in the region to bring humanitarian aid to displaced populations. Without going as far as to claim that these developments constitute a precursor to the ever-increasing trend toward stronger individual rights and weaker state power, it should still be noted, if only to prove that there is progress in this area.

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[4] The expression was coined by Bernard Kuchner, former French minister for Humanitarian Aid. The phrase has since been repeated by several people, including Minister Roland Dumas and legal expert Bettati. It implies the right to observation by the international community, when internal events cause others to carry the costs of a humanitarian catastrophe, despite Article 2(4) of the UN Charter that stipulates non-interference in the internal affairs of a country. The Americans forbidding Iraq to intervene militarily north of the 36th parallel would be interpreted in the same sense.

Chapter 3
The Canadian Example: Peace by Might or Peace by Right?

We could draw on the history of our neighbours to the south or on contemporary literature to illustrate the special characteristics and intensity of the debate on the two models we have endeavoured to describe. However, this exercise would be tiresome, and entail useless academic explanations.

The Canadian example is more familiar to us, and also illustrates much better the complexity of the arguments we have just discussed. In a recent study (Legault and Fortmann 1989), we analyzed the contents of the Commons debates and the press during the Diefenbaker (1957–1963) and Trudeau (1978–1984) eras. Almost 30 years separate the beginning and end of the periods in question: the Diefenbaker era was in the middle of the Cold War, whereas the comparable period chosen for the Trudeau government began against a background of detente and ended with a renewal of the Cold War at the beginning of the 1980s.

Three major conclusions can be drawn from our study. The first involves the international system; the second, Canada's desired role; and the third, Canadians' perceptions of the USA and the USSR.

Despite the differences in the two periods, there is a remarkable continuity between the eras in question, at least as regards Canadian attitudes to the international system. Among the variables that received much attention in the House of Commons, four were significant and their cumulative total indicates unequivocally that, in 67% of the cases, Members of Parliament (MPs) in the Diefenbaker era were either in favour of the UN, in favour of disarmament, in favour of increased North–South relations, or in favour

of detente generally [Table 2]. In other words, in the middle of the Cold War, the tone for Canadian attitudes toward the international system was already set, which is more than a little surprising. Of course, during the last 7 years of the Trudeau administration, opinion shifted slightly in favour of stronger East–West ties, which explains the desire for a change of the Cold War to a state of renewed detente, but there was also a significant trend in favour of increasing assistance to developing countries — in our interpretation, the strengthening of North–South ties includes assistance. In other words, to relate this to the foregoing discussion, Canadian MPs represent the most significant aspect of the "peace by right" model.

Paradoxically, however (and this was our second observation), the "peace-might" or "peace-security" dichotomy is reflected clearly in the types of action supported by the House of Commons. Although, under Diefenbaker, about 23% of the MPs were in favour of promoting peace and the peace movement, slightly over 15% also wanted an increased role for Canada in the North Atlantic Treaty Organization (NATO) [Table 3]. This dichotomy is less evident during the Trudeau era, although, as we shall see shortly, it was very obvious in Canadian newspapers. From 1978 to 1984, the most significant variable (44%), as indicated by the Commons debates, was the promotion of peace and the peace movement. Other considerations were the stated desire for a more neutral and independent Canada.

Table 2. Type of international systems advocated by Canadian Members of Parliament[a].

Diefenbaker era (1957–1963)[b]		Trudeau era (1978–1984)[c]	
Increase power of UN	20%	Reduce tension and conflicts	36%
Promote disarmament	18%	Strengthen East–West ties	28%
Reduce tension and conflicts	15%	Reinforce détente and arms control	17%
Strengthen North–South ties	14%	Increase foreign aid	12%
Other	33%	Other	7%

[a] All explanations regarding sampling, methodology, and variables used in the analysis can be found in Legault et al. (1989). Percentages are calculated according to the number of topics identified by each speaker in the House of Commons.
[b] n = 152.
[c] n = 875.

Table 3. Types of action supported in the House of Commons.

	Diefenbaker era (1957–1963)	Trudeau era (1978–1984)
Canada should encourage peace	27%	32%
Should be more independent	22%	15%
Should act as an interpreter for East–West issues	15%	20%
Should give more support to NATO	15%	22%

Source: The English newspapers used were the *Globe and Mail* and the *Toronto Star*; the French newspapers were *Le Devoir* and *La Presse*.

Finally, our third point merely corroborates the recent work of Don Munton (1983/4) on Canadians' negative view of the superpowers — in this regard, see Munton's 1985 survey published on behalf of the Canadian Institute of International Affairs in Toronto, and, more particularly, *Peace and Security in the 1980s: The View of Canadians* (Munton 1988). In our study, during the Diefenbaker era, 10% of MPs held a negative view of the USA, whereas the figure was 83% for the USSR. In the Trudeau years, 30% of those questioned held a negative view of the USSR, and 22% held a negative view of the USA. Both superpowers were considered, for all practical purposes, to be troublemakers — if not warmongers. These figures on Canadian public opinion are obviously much lower than those obtained by Munton (80% and over), but it goes without saying that the House of Commons is not necessarily the best place to express one's resentment toward the USA. What is significant is the fact that the superpowers were eventually seen as more or less jointly responsible for the arms race and the renewed Cold War in the early 1980s.

There are clear differences of opinion between the Commons debates and the press in general. In some ways, the press was curiously more conservative than MPs about Canada's military alliances and its participation in NATO. The Atlantic Alliance, furthermore, was seen as the best means for Canada to "make its voice heard" in the international system, for both periods under consideration — for the two periods, the values were about equal: 20.5%

and 21.8%. It is important to emphasize that, generally speaking, the press reflected the "peace–security" dichotomy better than did parliamentary opinion.

These conclusions are obviously surprising: while part of a military alliance and openly stating that it wished to defend democratic values, Canada was clearly distancing itself from the superpowers. Everything would seem to indicate that Canada had always been reluctant to participate in military alliances,[1] as they contradicted its natural penchant toward "peace by right." The history of NATO negotiations while the UN was in a state of paralysis explains the Canadian dichotomy very well: not being able to create a world that corresponded to its ideals, Canada finally had to chose what, at the time, it considered the lesser of two evils.

It is difficult to establish the relative importance of such variables as institutions, political parties, pressure groups, public opinion, and the media.[2] Where public opinion is concerned, things often change very quickly. Surveys conducted by Environics of Toronto demonstrate that Canadians do not feel threatened militarily. In December 1988, the problems considered most important were unemployment, free trade, and pollution, all well ahead of global conflict in order of importance; the military role Canadians preferred was that of peacekeeper (40%), followed by defending Canada against an attack (29%) and policing borders and coastlines (15%). For people with a university education, the most serious threat to humanity was pollution. From 1983 to 1988, on the other hand, over 50% of Canadians were worried about the possibility of nuclear war. However, although 39% thought that a nuclear war within the next 10 years was a possibility, 58% felt the likelihood of such an event actually occurring was small or nonexistent. By the fall of 1989, according to Environics, 47% of Canadians felt

[1] Although Canada took part in World War I out of loyalty to the British Empire and in World War II for geoeconomic reasons related to its links with the USA, Canadians as a whole are not fond of military matters or, in the words of the lamented John Holmes, of "The Bomb," that is, nuclear armament.

[2] For example, is the media more important than the MPs in shaping public opinion, or are the political parties more influential than the political platform put forward by the party leader?

that pollution constituted the most serious threat to humanity; 30% thought that the threat could be a disease such as AIDS, and only 19% believed it would be the possibility of a nuclear war (Adams 1989: 5).

It is also very likely that an analysis of the front pages of today's newspapers would make us draw the same conclusions. Headlines are constantly about pollution, the environment, drug control, terrorism, or the dangers of global warming. Generally speaking, public opinion is consistent with the counter-cultural view of the main issues concerning the basic survival of our planet. The press elite remains more conservative than MPs on the questions of military security per se, while the latter are chiefly concerned with maintaining a highly regulated and peaceful international system. As far as the Commons debates are concerned, there has certainly been an increase in "democratization" in this regard, and in the House, as elsewhere, the three principal models for the study of international relations are now fully part of our culture.

The debate has taken a new turn in the USA following the publication in 1989 of Francis Fukuyama's article "The End of History" in the magazine *National Interest* to which Strobe Talbott (1989) gave a scathing reply in *Time*. Both sides are obviously right, with the small qualification, however, that neither approach is destined to disappear, and that the debate has probably just started.

Chapter 4
The End of Nonsense and the Beginning of History?

We could just as well invert the ideas of Fukuyama and Talbott, and ask ourselves whether the relative "peace epidemic" of 1989, and the increased attention given to environmental problems in official statements and communiques, mark the end of an era (the Cold War) and the beginning of a new period of history in which cooperation among former adversaries will create a more harmonious situation for the individual and the environment.

We would, thus, gradually return to the situation that should have existed in 1945, but which the reversal of alliances and ideological heterogeneity made impossible. Pushing this argument to its logical outcome, one could even say that the Cold War made the world lose almost 45 years of history (hence the title used for this chapter: "The End of Nonsense"). As for inverting the titles of the two articles, there is no use claiming that, with the gradual spread of democratization of political regimes all over the world, a new form of history is born, although the old and the new are both still very much present. The "Beijing Spring" failed, wars continue to wreak havoc throughout the world, nationalism is on the rise almost everywhere, and crimes against the individual, minorities, and ethnic groups are just as frequent today as they probably were in the past. If a new era is beginning, it is characterized rather by changes in East–West and North–South relations and the shared awareness that we are now inhabiting the same planet, whatever the price we have to pay to convince ourselves that the Earth is indeed round. We share the same problems and we must begin to

find solutions to structural inequalities before the end of the century if social justice is to be realized.

A great deal has been written on East–West relations and on the nonsense of the arms race between the superpowers and the astronomical sums that have been spent on it in the past. Since 1968, SIPRI (Stockholm International Peace Research Institute) has been making a complete inventory of military spending throughout the world. Since 1959, the IISS (International Institute of Strategic Studies) has dealt with the same problems in its annual publications. The UN has published several reports on the issue of the economic and social consequences of disarmament, as well as on the links that should exist between disarmament and development.

We return later to these problems, on which the international community is far from reaching a consensus. The same holds true for the various theories behind the arms race, which are based on everything from structural causes related to the international system (weapons being merely the reflection of more intense international conflicts)[1] to internal causes affecting both the military–industrial complex (Yarmolinsky 1971) and the race for technological superiority. This does not include the "action–reaction" behaviorist model, where the action of one party results almost necessarily in a reflex action from the other (works by Michael P. Wallace are especially revealing in this regard; see for example Wallace 1979). It would certainly be easy, based on the literature available, to show that a wide variety of causes have been responsible for the arms race between the superpowers — there are several models of analysis here: for a more in-depth review, see Luterbacher (1975) and Moll and Luebbert (1980).

Over and above these concerns, however, is the increasingly obvious fact that 45 years of the arms race has not made the world safer than it was in 1945. Former President Kennedy described this situation very well when, in the early 1960s, he said that after 20 years of the arms race, the world was "neither more

[1] The entire theory of the realist and neorealist school of international relations is based on this premise.

nor less secure" than before. The Palme Commission document (1982), *Common Security: A Blueprint for Survival*, as well as the Commission's most recent report (1989), clearly sets out the main subjects explored: "common security through the rule of law"; "common security through economic development, social justice and protection of the planet"; and the need to take action so that common security gradually replaces "the expediency of nuclear deterrence by arms" (Palme Commission 1989: 6, 8, and 27). No more elegant way could be found to emphasize the importance of the last two of the three models we have described and, in so doing, focus on the pressing need to limit the most destructive aspects of "peace by might."

Concerning national security, absolute security for one nation brings absolute insecurity for the other. As mentioned by John Sigler (1989), quoting an article in the *New York Times*, "the behaviour of the strong invariably determines the ambitions of the weak." This maxim has never been truer than when applied to the East–West problem and the need to ensure European security. Immediately after World War II and in the early 1950s, the West used its ingenuity to counteract the numerical superiority of the Warsaw Pact countries. Tactical nuclear weapons were deployed in Europe. The USSR then followed suit, with the result that no one in the West seriously considered raising the stakes,[2] the Germans being absolutely convinced that these weapons could not be used. In the late 1970s, when the USSR in turn decided to increase its efforts and deploy its SS-20s (the first were deployed in 1977), the West responded by installing the Pershing II and the cruise missile on European soil. After all this effort, the two sides agreed in late 1987 to sign the first intermediate nuclear forces (INF) agreement, which would be ratified at the Moscow summit in late May and early June of 1988. Reason thus triumphed over technological instability, and it may now be possible to speak of "the end of nonsense."

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2 The only exceptions dating back to Presidential Directive (PD)-59 and various resulting policies, such as follow-on forces attack (FOFA) and other doctrines intended to be used to confront the USSR in wartime with a "risk of maximum survival"; however, these concepts today are rapidly becoming obsolete.

The bilateral talks on how to reduce friction in the Third World, the withdrawal of Soviet troops from Afghanistan and of Vietnamese troops from Cambodia, the improvement in Sino–Soviet relations, the signing of agreements on the reduction of conventional forces in November 1990, and the signature of a strategic arms reduction talks (START) agreement in July 1991 all signal the beginnings of a transition period in which conflict will gradually be replaced by cooperation. We no longer talk of detente, a term that was publicly condemned under the Reagan administration, but of a positive climate of East–West cooperation, especially as regards economic matters.

It is very likely that the beginning of the end of nonsense will also be reflected in global military spending. It is useful here to examine what has happened over the past 25 years because, if there is a meaning to history, the area of military spending has been the most disastrous for both industrialized and developing countries. We first look at changes in global spending, and then examine developments in North–South arms trade.

Chapter 5
Economic Growth and World Military Spending

Despite arguments on the use of the gross national product (GNP) as a measure of wealth and economic growth, this universally recognized criterion is used here to measure the increase in world economic growth from 1965 to 1988.[1] We used the same indicator to measure growth in world military spending for the same period: the ratio of military spending to GNP. All data are in 1978 constant US dollars. For the most recent period, 1989–1990, we could only rely on general trends, mostly measured in current dollars. This provides only a gross general approximation of the situation, given the erratic inflation rates of several countries.

Although the world GNP certainly rose in absolute terms from 1965 to 1988 [Figure 1], average increases for each of the successive 5-year periods under consideration actually declined. The overall economic growth rate was 5.7% for the entire period [Table 4], but over the same period, military spending rose 7.4% on average, leading us to conclude that military expenditures were disproportionately higher than economic wealth.

As shown in Figures 1 and 2, curves for economic growth and military spending were fairly similar, which, as several economists have emphasized, indicates that military spending is a function of economic growth.[2]

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[1] All statistical data for this chapter and those concerning arms transfers were gathered under the supervision of Daniel Doyon and Cheryl Jones.

[2] From 1965 to 1988, world GNP rose from $5.2 to $12 trillion (1978 constant US dollars), while over the same period world military spending rose from $0.33 to $0.58 trillion, peaking in 1984 at $0.61 trillion (see Appendix and Supplement 1). However, the growth of military spending declined in the period 1985–1988.

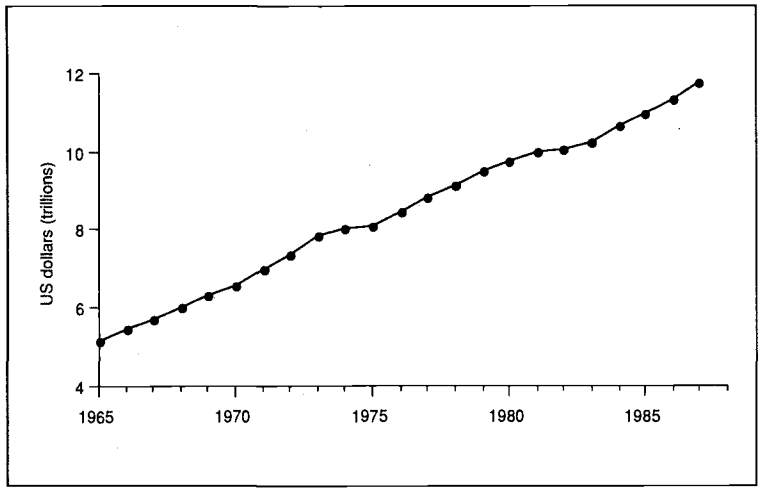

Figure 1. World gross national product (GNP), 1965–1988 (1978 constant US dollars). Source: Supplement 1.

Table 4. Average rates of growth (%) for GNP, military spending, and population.

	GNP	Military spending	Population
1966–1969	5.5	6.9	1.9
1970–1974	12.5	12.6	2.0
1975–1979	3.8	6.4	1.8
1980–1984	2.7	10.5	2.0
1985–1988	3.7	1.3	3.7
1966–1988	5.7	7.4	2.3

Source: Supplements 2, 3, and 22A.

If we break down world military spending by region, Eastern Europe spent the most on arms in absolute terms, followed by the USA and Western Europe [Figure 3]. If we admit that military spending by Eastern Europe is mainly supported by the USSR, we can conclude that, although the USSR's spending curve is continuous and growing rapidly, that of the USA is U-shaped, bottoming out in 1976 and then rising again until 1988.

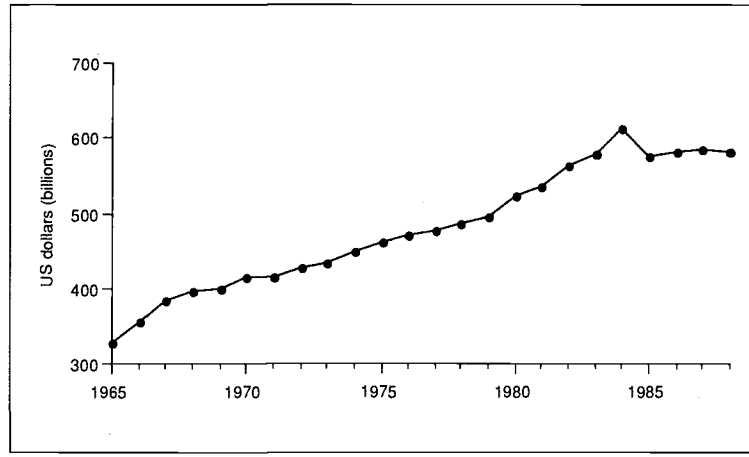

Figure 2. World military spending, 1965–1988 (1978 constant US dollars). Source: Appendix.

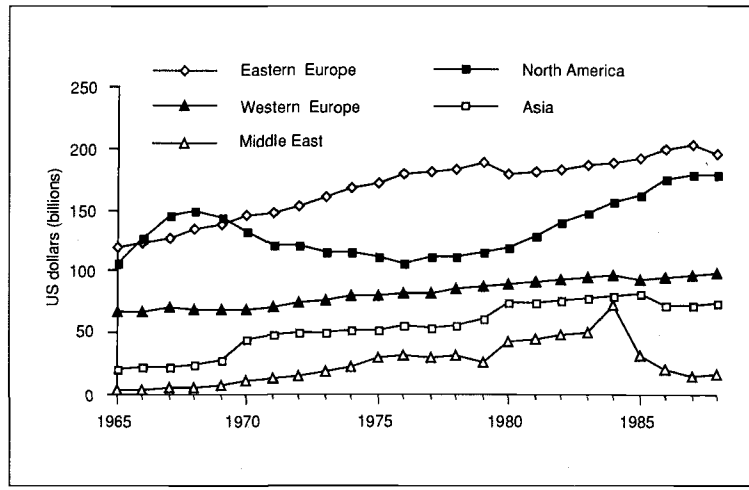

Figure 3. Military spending by regions, 1965–1988: North America, Eastern Europe, Western Europe, Asia, and the Middle East (1978 constant US dollars). Source: Appendix.

The breakdown in East–West military spending is revealing in several regards. Three important conclusions can be drawn from Table 5. First, the military spending of the NATO countries has

Table 5. East–West military spending
(in millions of 1978 constant US dollars).

	1965	1975	1985	1988	1965–1988
North Atlantic Treaty Organization (NATO)					
North America	107 105	111 920	163 036	179 013	3 226 635
Western Europe	66 638	80 880	92 362	98 552	1 983 242
Total NATO	173 743	192 800	255 398	277 565	5 209 877
Warsaw Pact (WP)					
USSR	103 823	151 381	165 416	161 743	3 502 504
Eastern Europe	16 244	21 133	25 855	34 424	528 464
Total WP	120 067	172 514	191 271	196 167	4 030 968
Ratios					
USA/Western Europe	1.6:1	1.3:1	1.7:1	1.8:1	1.6:1
USSR/Eastern Europe	6.4:1	7.2:1	6.4:1	4.7:1	6.6:1
NATO/WP	1.4:1	1.1:1	1.1:1	1.4:1	1.3:1

Source: Appendix.

always exceeded that of the Warsaw Pact. For 1965–1988, the ratio is 1.29:1 in favour of the NATO countries, with the weakest point in 1975.

Second, for all intents and purposes, the USSR alone carried the cost of the arms race in the Eastern Bloc. In contrast, the defence burden was much more equitably shared in the western alliance than in the eastern one [Table 5]. For 1965–1988, the USSR spent 6.6 times more than its allies in Eastern Europe, the ratio increasing to 7.2 times in 1975. In the same period, the USA only showed a ratio of 1.63:1 in relation to its NATO allies.

Third, if we examine the relationship between the USA and Western Europe, we see that the burden was more equitably shared in 1975 than in 1965, 1985, or 1988. In fact, in 1988, the USA's share was almost twice as high as that of Western Europe, which is a good indication of how Europeans seem to perceive the threat from the East. This could only revive the debate in Washington over a more equitable division of responsibilities within the Atlantic Alliance. In a period of detente, both the USA and Western Europe may

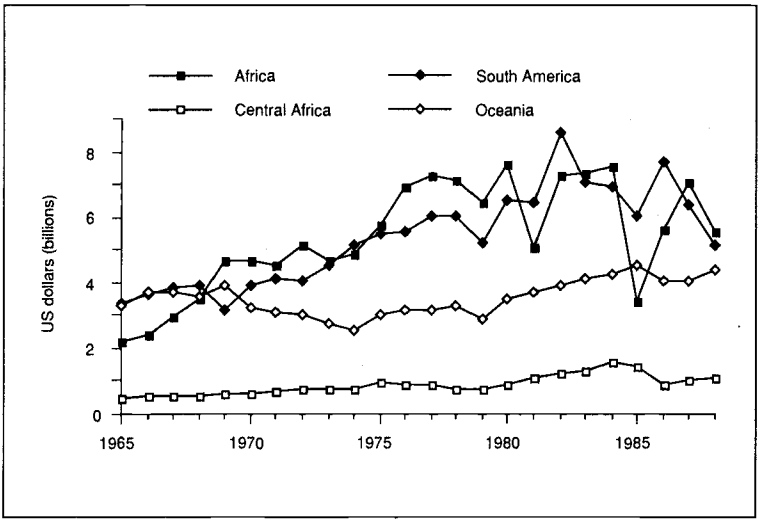

Figure 4. Military spending by regions, 1965–1988: Africa, Central America, South America, and Oceania (1978 constant US dollars). Source: Appendix.

gradually reduce their military spending, the latter perhaps more quickly than the former. Such conditions would not make it easy to maintain large numbers of US troops in Europe.

As far as the other regions are concerned,[3] Asia and the Middle East constitute by far the two most important. The sudden rise in Asia's military spending curve between 1975 and 1980 [see Figure 3] was attributable mainly to the increase in the military expenditures of the People's Republic of China. Far behind these two regions come Africa, South America, Oceania, and Central America [Figure 4].[4]

[3] These include Africa, Central America, South America, Asia, the Middle East, and Oceania. All tables and graphs are based on the following particulars: the North includes the industrialized countries, Australia, Japan, and New Zealand; the South includes what are usually considered the southern countries, minus Japan and Oceania. In the regional breakdowns, however, Asia includes Japan. For further details, see Supplement 24, which lists the regions and their respective countries.

[4] In 1988, military spending for these regions amounted to $5.6, $5.1, $4.4, and $1.1 billion (1978 constant US dollars) respectively, as compared with $74 and $17 billion for Asia and the Middle East, respectively. The substantial decline in military spending by these last two regions since 1985 is, in part, the result of a statistical aberration: the major devaluation of the US dollar in 1985.

If we consider the total figures for world GNP and military spending for the entire 1965–1988 period [Table 6], we note a remarkable stability in the North–South relationship in these variables, at least in terms of absolute values. Thus, the North accounts for about 82% of world GNP and military spending, and the South for about 17%. What we have here is almost a sustained world balance.

Table 6. World gross national product (GNP) and military spending.

	World	North	South	Ratio North:South
GNP (trillions of 1978 constant US dollars)				
1965	5.16	4.43 (85.8)[a]	0.73 (14.2)	6.07:1
1975	8.11	6.73 (83.0)	1.37 (17.0)	4.88:1
1985	10.94	8.78 (80.3)	2.16 (19.7)	4.06:1
1988	11.75	9.34 (79.5)	2.41 (20.5)	3.88:1
1965–88	205.7	169.0 (82.2)	36.7 (17.8)	4.60:1
Military Spending (billions of 1978 constant US dollars)				
1965	328.2	300.6 (91.6)	27.6 (8.4)	10.88:1
1975	462.1	376.0 (81.4)	86.1 (18.6)	4.36:1
1985	576.0	464.2 (80.5)	111.8 (19.5)	4.12:1
1988	581.0	493.1 (84.9)	87.9 (15.1)	5.61:1
1965–88	11 529.3	9 530.7 (82.6)	1 998.6 (17.3)	4.77:1

Increase (%)	1966–69	1970–74	1975–79	1980–84	1985–88	1966–88
GNP						
North	5.3	4.2	3.0	1.9	2.7	3.4
South	4.2	8.7	5.3	4.5	1.9	5.2
Military spending						
North	4.6	0.7	1.7	2.5	2.2	2.2
South	9.2	15.9	3.2	12.7	7.3	7.2

Source: Appendix and Supplements 1, 2, and 3.

[a] Values in parentheses are percentages of world value.

A closer look, however, reveals that this is not the case at all because, from 1966 to 1988, the increase in the South's GNP (5.2%) was much higher than that of the North (3.4%). Thus, for the first four 5-year periods under consideration, we can see the North's global GNP gradually declined, whereas the South's GNP rose steadily, except for the 1985–1988 period. Average increases in military spending in the South were also extremely high between 1966 and 1988. Generally speaking, ignoring statistical aberrations, there is no doubt that military spending in the South increased more rapidly than it did in the North for the period under consideration, and that the South made definite economic progress, putting the North in a position of relative decline — for the entire 1966–1988 period, the North's military spending rose 2.2%, as compared with 7.2% for the South.

We can obviously ask who benefited from this transfer of, or increase in, wealth at the South–South level. Table 7 provides the main answers to that question. The only significant figures are obviously those for Asia, which in 22 years practically doubled its share of the world GNP. Japan and China obviously benefited most from this transfer of, or increase in, wealth. It would seem that, since 1985, figures for South America and Africa have risen only slightly, while those for Central America and the Middle East have experienced a slight downturn.

Changes in world military spending patterns are dramatic. In 1965, figures for the North and South were 91.6% and 8.4% of the

Table 7. Share (%) of world gross nation product (GNP) by region (1965, 1985, and 1988).

	1965	1985	1988
Asia	13.20	22.61	24.90
South America	3.27	3.62	3.70
Africa	2.24	1.79	2.01
Central America	1.13	1.28	1.16
Middle East	1.35	2.41	1.82

Source: Supplement 4.

world total respectively; however, in 1985, they were 80.5% and 19.5% (from Supplement 5, World). In 1988, the South accounted for 17.3% of world spending, whereas the North reached 82.8%.

In relative terms, the South's military growth was very rapid in the early 1970s and 1980s (see Supplement 3), but slow toward the late 1970s and negative in the latter half of the 1980s (5.3%). Statistics also show that, between 1985 and 1988, despite the fact that military spending rose slightly in the North and fell in the South, there was a relative decline in world military spending.

Table 8 indicates the relative importance of various regions with respect to world military spending (from Supplement 5). This table merely confirms what we already know, that most regions are relatively stable, with the exception of Asia, whose share of world military spending doubled in the space of 20 years. Figures for the Middle East are gradually returning to normal, falling between 1985 and 1988 from 5.6% to 2.9%.

Furthermore, if we consider the often-used ratio of military spending to GNP for the world as a whole, the futile and massive diversion of a portion of national wealth toward purely military ends is cause for concern. Military spending in the long term cannot help but contribute to the poverty of the South in relation to the North, especially if a major imbalance between military spending and GNP occurs to the same degree in both hemispheres. In this regard, Table 9 shows the major trends that occurred from 1965 to 1988 (see Supplement 6).

Table 8. Share (%) of world military spending by region (1965, 1985, and 1988).

	1965	1985	1988
Asia	6.34	14.19	12.43
Middle East	1.30	5.56	2.86
Africa	0.67	0.59	0.94
South America	1.02	1.18	0.86
Oceania	1.00	0.78	0.74
Central America	0.15	0.25	0.18

Source: Supplement 5.

Table 9. Ratio (%) of military spending to world gross national product (1965, 1970, 1985, and 1988).

	1965	1970	1985	1988
World	3.97	4.37	5.15	4.44[a]
North	6.78	6.34	5.28	4.52[a]
South	3.77	6.10	5.22	4.37[a]
Middle East	6.55	9.89	13.77	7.75
Oceania	3.23	2.65	2.47	2.62
Africa	1.85	2.67	3.02	2.29
Asia	3.84	4.33	4.92	2.46
South America	2.04	1.98	2.72	1.14
Central America	1.24	2.11	1.03	0.78

Source: Supplement 6.

[a] 1987 values.

While the world spent almost 4% of its GNP on arms in 1965, the figure was 5.1% by 1985 and 4.4% in 1987. This increase was largely the result of the South's massive purchases of weapons. From the early 1970s to 1985, the South showed a slightly higher rate of military spending, at least as far as the ratio of military spending to GNP was concerned (see Supplement 6, World). This proves, once again, the theory of growing militarism in the South, a trend that is obvious throughout the period 1970–1985.

The leader here was obviously the Middle East, which by 1985 was spending almost double the amount on arms that it had in 1965. Over the same period, the North reduced its military spending slightly in relation to its GNP, as did Central America; Asia's share went up one percentage point; and Africa, a continent with very low revenues, practically doubled the amount of its military spending in relation to its meagre GNP. An improvement of the overall situation appeared in the mid-1980s; since 1985, only Oceania of all the regions has been spending a greater portion of its financial resources on arms. These recent trends are obviously encouraging. Since 1987, in fact, the South has been spending 4.4%

of its GNP on arms, as compared with 5.2% in 1985. This was the beginning of progress that continued in 1988 and 1989. Given their massive debts, the countries of the world appear to be making a virtue out of necessity!

Figure 5 illustrates the covariation of the curves for North–South economic growth and military spending. Strangely enough, however, while in the 1970s economic growth began to rise faster than military spending in the North, the opposite was generally true for the South. The situation was reversed in 1985; however, this was the result of a statistical aberration attributable to the devaluation of the dollar that artificially inflated data for the South, and deflated those for the North.

The fact that military spending is probably better managed in the North than in the South is doubtless the only logical explanation for this phenomenon (in this regard, see Kupchan (1989); if this theory is true for the countries of the North, it is even more so for the countries of the South). Actually, there may be another logical explanation as well, but one that is hardly reassuring. The

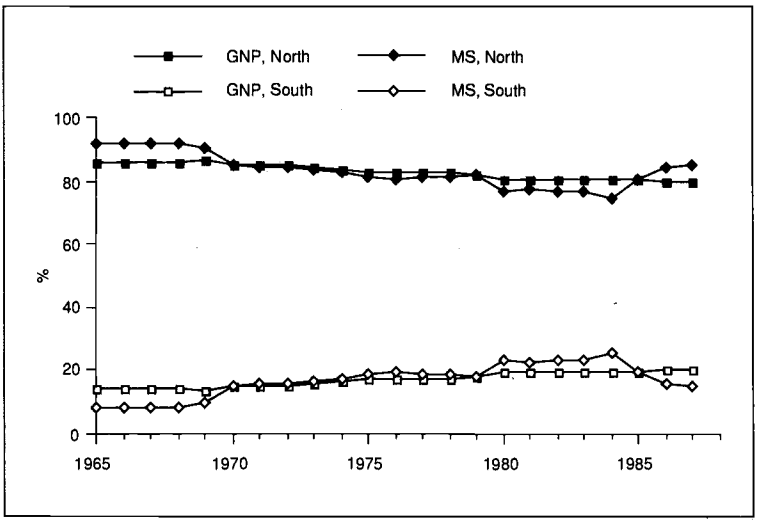

Figure 5. North and South shares (%) of world gross national product (GNP) and military spending (MS). Source: Supplements 4 and 5.

North has not overtaxed its economic development by committing itself to military expenditures, whereas the contrary might be true for the South: there may be an element of truth in all this. However, studies have shown that, for the countries of the Organisation for Economic Co-operation and Development (OECD) at least, it is probably more certain that military spending can only increase to the detriment of domestic spending. Whatever explanation we choose, it only shows the growing burden of military spending by the South in relation to its economy.

Chapter 6
Arms Transfers

Arms transfers must be distinguished from contracts for the purchase, acquisition, or assignment of arms. The former may take place, or may even be cancelled, several years after a contract is signed and often under political conditions that are different from those under which the original negotiations took place (see Klare 1984; the distinction is also valid for arms agreements). As far as statistics are concerned, however, analysts must rely on the estimated or officially quoted value of arms that have actually been transferred.[1]

Most arms transfers involve government action, although a small percentage represents private transactions between vendors and purchasers. For the USA, these figures vary between 80 and 90% for the government, and between 10 and 20% for the private sector (see Klare 1988: 75). However, according to certain observers, the black market in arms is apparently playing an increasingly large role in international dealings, "Irangate" being only one aspect of this epiphenomenon. This would, therefore, tend to distort official statistics — Klare (1989: 46) estimates this market to be worth between $5 and $10 billion per year. Furthermore, arms transfers are dependent on the evolution of conflicts throughout the world, on many factors relating to the status, prestige, and

[1] The statistics used here end with those for 1988, the last year included in the official 1989 publication of the Arms Control and Disarmament Agency (ACDA) on World Military Expenditures and Arms Transfers (ACDA 1990). The more recent statistics have been taken from the SIPRI annual yearbooks on world armaments and disarmament, and have occasionally been converted to 1978 constant US dollars.

particular ambitions of a given country (the case of Libya is especially interesting — see Gongora (1989)), and on a range of domestic policy considerations that are the product of permissiveness, restraint, or the strictest control. In most cases, and in the USA in particular, transfer policies fall under the executive branch of government.[2] Other institutions certainly have their say, especially as regards direct constraints (legislation, for example) and indirect constraints (regular or special Congressional reports, for example), but arms transfers are largely the domain of the executive branch of government in the foreign affairs arena.

Most commentators are, therefore, correct in saying that many problems in this area may be solved through future multilateral negotiations. Andrew Pierre of the Council on Foreign Relations insists on the importance of supplier-initiated, regionally oriented talks, while others suggest that the purchasing countries also be involved in such discussions (Pierre 1982: 310; Ohlson 1988: 242). Among the numerous other suggestions aimed at limiting arms transfers, we should note the levying of a special tax on arms sales, the establishment of a watchdog agency similar or comparable in its functioning to the International Atomic Energy Agency (IAEA) in Vienna, the establishment of an official register for arms transferred, the creation of a disarmament fund, and all other proposals aimed at promoting regional peace and the peaceful resolution of disputes (Fontanel and Guilhaudis 1988; Simpson 1988).

Brzoska and Ohlson (1987) distinguish four main phases in the evolution of arms transfers. The first phase corresponds largely to the "donation" stage, which extended from the early 1950s to the mid-1960s when the superpowers tried to support their respective allies in strategically important geopolitical areas.

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2 Government transactions are administered by the Defense Security Assistance Agency (DSAA) through the Foreign Military Sales (FMS) program, whereas private contracts go through the State Department's Office of Munitions Control (OMC). Military transfers are subject to the 1976 Arms Export Control Act and its instrument of enforcement, the International Traffic in Arms Regulations (ITAR). For the various methods of administrative control over arms transfers in France, the Federal Republic of Germany, Sweden, the United Kingdom, and the USSR, see Allebeck (1989).

The second phase marked the beginnings of trade per se, with exported weapons becoming increasingly sophisticated, Europe decreasing its military spending, and the Third World increasing its purchases. This period began toward the mid-1960s and preceded the rapid expansion in military exports that occurred during the 1970s. Several factors explain this phenomenon, in particular:

- The coming to power of the Nixon administration, which discontinued the restrictive policy practiced by Kennedy and Johnson;
- The 1973 October War, which made the price of oil skyrocket and obliged several countries to recycle their petrodollars;
- The sudden intervention in the arms market of the USSR, which was in pursuit of hard currency and increased influence in the Third World;
- The need felt by several countries to renew their supply of military equipment, which dated from the 1940s and 1950s (this cycle comes into play, on average, every 15–20 years); and
- The rapid proliferation of regional conflicts throughout the world.

The third phase began in the late 1970s and ended with the economic recession of 1983. Its main characteristics were:

- The arrival of European newcomers on an increasingly competitive international market;
- The growing militarization of several Third World countries, fueled by the economic crisis and the instability of their political institutions;
- The hardening of bilateral strategic relations following the Soviet intervention in Afghanistan; and
- The exacerbation of several regional conflicts (India–Pakistan, Iran–Iraq, and Argentina and Chile), which would provide the USSR with the opportunity to provide massive support to Angola and Ethiopia, and the USA with an unexpected pretext to approve the sale of AWACS (airborne

warning and control system) aircraft to Saudi Arabia; F-16 fighters to Pakistan, South Korea, and Venezuela; AH-1 helicopters to Jordan; and E-2C airborne early warning aircraft to Singapore.

The fourth phase began toward the mid-1980s. This phase coincided with the export of the most sophisticated systems to date, such as the MiG-29s destined for Syria and India even before they had been put into service in the Soviet air force. It also coincided with the development of new long-term financial policies and occasionally with the write-off of old debts in exchange for the purchase of new military equipment, such as the Al Thakeb antiaircraft defence contract between France and Saudi Arabia. This phase also included the implementation of an increasing number of joint-production agreements, some of which provided for industrial compensation for domestic industries and others that contained clauses on technology transfer, the training of military personnel, production under licence, and marketing conditions.

The appearance of new weapon producers in the countries of the South, such as Argentina and Brazil, and also India, Israel, South Africa, South Korea, and Taiwan, seems to coincide with this fourth phase. The new manufacturers were responsible for nearly 8% of arms transfers during the first half of the 1980s and nearly 10% during the second half (ACDA 1990). The end of the Iran–Iraq War, the growing debt load of the South, and the Gulf War, which enabled the USA to reestablish its superiority, are potential factors that could further reduce advantages enjoyed by the South's producers.

Today, we are entering what is perhaps a fifth phase, especially given the joint production agreement for the FS-X fighter (also called the SX-3) signed by Japan and the USA, both of whom want to specialize in high technology. On the bilateral level, it would seem that both sides are beginning to understand the need for arresting the costly spiral of the arms race between the superpowers and reducing their rivalries in the Third World. Furthermore, military exports have clearly been declining for several years, and it is

possible that only the rich countries in the Middle East and Asia may continue to refurbish their military arsenals with high technology weapons in the future.

Exporting countries

If we deal only with net arms exporters,[3] in absolute volume, arms transfers from 1965 to 1988 amounted to $472 billion (1978 constant US dollars). Of all the transfers in question, 24% occurred between 1965 and 1974 ($111.3 billion), 53% between 1975 and 1984 ($252.2 billion), and 23% between 1985 and 1988 ($108.5 billion). The increase in arms transfers between 1975 and 1985 is even more impressive when one considers it does not include the small producers such as Bulgaria, Egypt, Israel, North Korea, South Korea, Pakistan, or Saudi Arabia (Supplement 7). The most significant increases in military trade took place in the early and late 1970s; the early 1980s (1980–1984) saw the largest increases ever (more than 12%); but in 1985–1988, growth rate was negative (Supplement 8).

Figure 6 provides a very clear indication of general trends in the gross monetary value of arms exports. Although, in 1965, the arms trade accounted for $7.4 billion per year, by 1985 it represented $27.4 billion. The highest point was reached in 1984, with record sales of $34.6 billion. In 1986, the arms market fell to the lowest point of the decade ($25.2 billion), but rose in 1988 to $28.6 billion (in 1978 constant US dollars).

During the 20-year period under consideration (1965–1985), the major powers accounted for two-thirds of arms exported. The suppliers ranked as follows: USSR (35.5%), USA (31.2%), France (9.8%), and the United Kingdom and the Federal Republic of Germany (4.5% each). However, between 1980 and 1985, the figures for the same countries were 36%, 21%, 14%, 5%, and 6%, respectively; this indicates the important role played by the USSR during this period and the relative decline in that played by the USA. This

[3] That is, the following 14 countries: Austria, Brazil, Canada, the People's Republic of China, Czechoslovakia, France, the Federal Republic of Germany, Italy, Sweden, Switzerland, the United Kingdom, the USA, the USSR, and Yugoslavia.

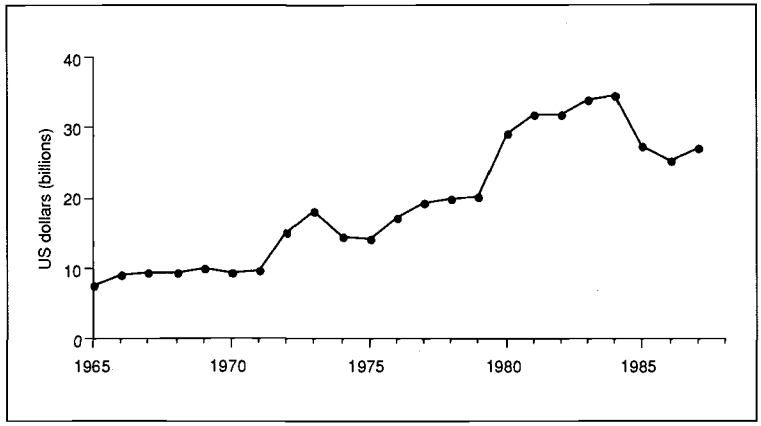

Figure 6. Monetary value of arms exports, 1965–1988 (1978 constant US dollars). Source: Supplement 7.

decline was counterbalanced by the increased importance of the major European suppliers, with France, the Federal Republic of Germany, and the United Kingdom alone accounting for 25% of the market. Also to be noted is the appearance of new producers such as the developing countries, Brazil, China, and India.

For the period 1985–1988, four powers shared $108.5 billion of arms transfers in the following proportions: USSR 40.7%, USA 26.3%, China 10.2%, and France 9.2%. These four countries alone exported 86% of the military equipment transferred during this period.

Figure 7 shows the predominance of the USA during the Cold War. From 1973, with the Yom Kippur War, the USSR caught up with the USA and, during the same period, the European countries started to make their presence felt in the arms market.

Figure 8 shows the overall monetary value of military exports for the five leading suppliers between 1975 and 1988. The USSR began to take the lead in 1977 with sales fluctuating between $11 and $12 billion (1978 constant US dollars), with the exception of 1985. In the late 1970s, China and France began to play an increasingly significant role to the point that, in 1988, China ranked third among exporters, immediately after the USSR and the USA. In 1988,

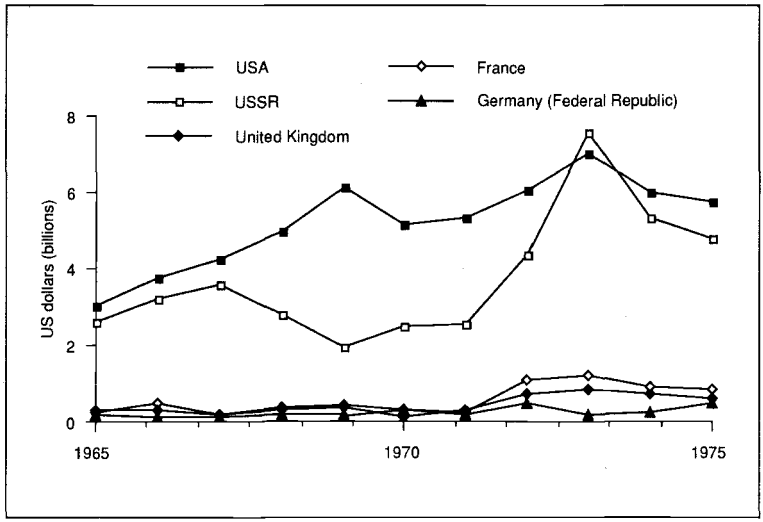

Figure 7. Five leading arms-exporting countries, 1965–1975 (1978 constant US dollars). Source: Supplement 7.

China's share in the arms traffic was estimated at $11.1 billion (in 1978 constant US dollars). In 1989, France regained third place, while China lost ground as a result of the Iran–Iraq War [see SIPRI 1990: 220 — SIPRI data are calculated in 1985 constant US dollars and are not based on the same criteria; the ranking order, however, remains undoubtedly the same]. The sales of the USA, the USSR, and China decreased, in 1989, to $11.2 billion, $7.7 billion, and $1.1 billion respectively.[4] In 1990, another slight decrease in arms sales will, most probably, be recorded, with an accelerated revival in 1991 as a result of the Gulf War. The USA will clearly take a leading position in this increase.

SIPRI figures indicate that, between 1985 and 1989, arms transfers to the Third World were 1.5 times as high as those among industrialized countries ($106 billion in North–South transfers as

[4] See editorial in *New York Times* of 2 March 1991 (p. 22) citing figures from the report by Richard Grimmett of the Congressional Research Service (CRS). These figures are obviously in current dollars, which makes the decrease even more drastic (possibly 25%), if converted to 1978 constant dollars. For China, see *Time* of 22 April 1991 (p. 39).

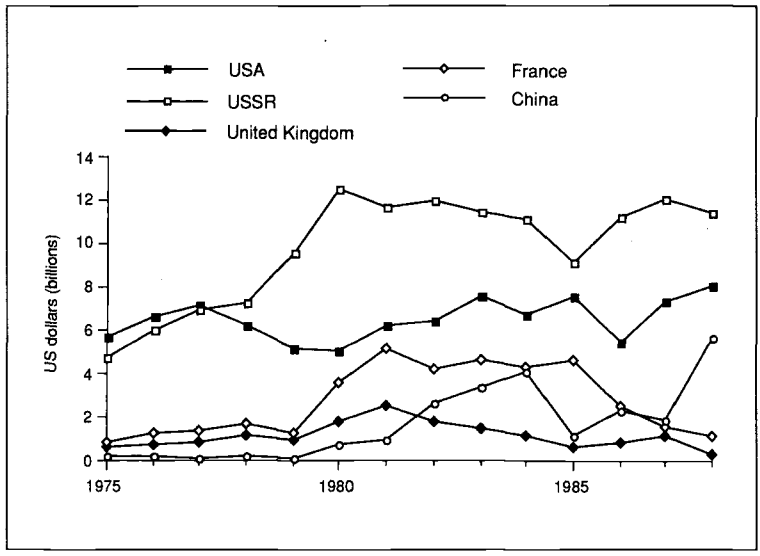

Figure 8. Five leading arms-exporting countries, 1975–1988 (1978 constant US dollars). Source: Supplement 7.

compared with $67 billion in transfers among the industrialized countries, in 1985 constant US dollars: see SIPRI 1990: 220). During this time, the lion's share of North–South transfers obviously involved the five major powers. The USSR accounted for 43.8% of the market, the USA for 20.2%, China for 11.6%, France for 6.3%, and the United Kingdom for 5.3%. Next came the Federal Republic of Germany and Italy, at 1.8% and 1.6% respectively. Preliminary data for 1989 indicate that, for France alone, orders for arms dropped by 40% — orders for 1989 appear to have represented between 23 and 25 billion francs, as compared with 37.5 billion francs for 1988 (see *Le Monde*, 4–5 March 1990 (p. 16)). This trend will probably become more pronounced in the future, as the USA is undoubtedly playing a predominant role in Saudi Arabia after the Gulf Crisis (see *Le Monde* of 29 September 1990 (p. 13) reporting contracts of more than $2 billion between Saudi Arabia and the USA for the next 2 years).

Lastly, we should note that a major portion of military aid to Israel and Egypt has taken the form of donations. According to

the International Institute for Strategic Studies (IISS 1989), almost $13 billion worth of arms were transferred this way to the Middle East from 1985 to 1988. Of this total, $5 billion worth went to Egypt and $6.7 billion to Israel. The Middle East received almost 87% of all US aid given in the form of donations for this period.

The proportion of arms sales to total exports for the 1970–1988 period is 2.4% of the exports of net arms-exporting countries. The highest rate of total military exports was reached in the 1985–1988 period, at 3.5% (see Supplement 9). If the imperialism theory were still in vogue today, there would be no difficulty describing the USSR and China as the main perpetrators of such military imperialism. For the 1985–1988 period alone, the proportion of military sales to total exports for the two countries was 20.8% and 5.9%, respectively (see Supplement 9). For the six leading exporters, the situation is shown in Table 10.

It is difficult to identify at exactly what point military trade significantly begins to distort national economies, but the USSR was clearly a phenomenon in itself, even if it could be explained by the Kremlin's desire for hard currency. The same type of argument may also be applied to China. Generally speaking, the late 1980s and early 1990s seem to presage a difficult and delicate situation. It will be difficult because, apart from the strong competition among them, the major exporters will also have to confront significant breakthroughs into the arms market by the new producers from the

Table 10. Military trade as percentage of total exports for six leading arms-exporting countries.

	1970-1988	1980-1984	1985-1988
USSR	12.8	12.0	20.8
China	4.8	3.0	5.9
USA	4.4	4.1	4.3
Czechoslovakia	4.3	4.7	4.4
Yugoslavia	1.7	1.0	3.3
France	1.6	1.1	3.9

Source: Supplement 9.

South. The situation will also become delicate, partly because of the significant surplus occurring in the Western and Eastern arsenals after the East–West reductions, and partly because of the need to rearm the countries in the Gulf according to balance-of-power principles embraced especially by the USA. Western producers must, therefore, move between restraint and competition, between arms control and security. Once again, the principle of security seems to take precedence over that of reason (see the revealing article by Klare (1991b)).

Importing countries

From 1965 to 1988, the value of arms imports for the net importing countries as a whole was $342 billion — "net importing countries" are those that import more military equipment than they export: 92 countries (see Supplement 10). The majority of these transfers (37%) took place between 1980 and 1984 — close to 60% between 1975 and 1984 and 22% between 1985 and 1988.

From 1965 to 1988, the six leading recipients were, in descending order, Iraq, Saudi Arabia, Iran, Syria, Libya, and India, which shows clearly the still-dominant role of the Middle East in the arms trade [see Table 11]. The Middle East accounted for 50.4% of all arms imports, and for 46.3% of the total arms trade between 1985 and 1988. Nothing seems to indicate that these figures will change in the future, despite the fact that some countries, such as India and North Korea, have recently become important importers of military equipment.

Figure 9 and Table 11 provide a clear picture of the changes in the situation in the Middle East. This region clearly dominates all military spending, taking 34% of the arms market throughout the period 1965–1988, with Iraq in the leading position. The Iraqi market has surpassed the Iranian one since 1980, and Iraq and Saudi Arabia have dominated the market since 1981. The breakdown for the major players in the Middle East, from 1965 to 1988 and from 1985 to 1988, is shown in Table 11.

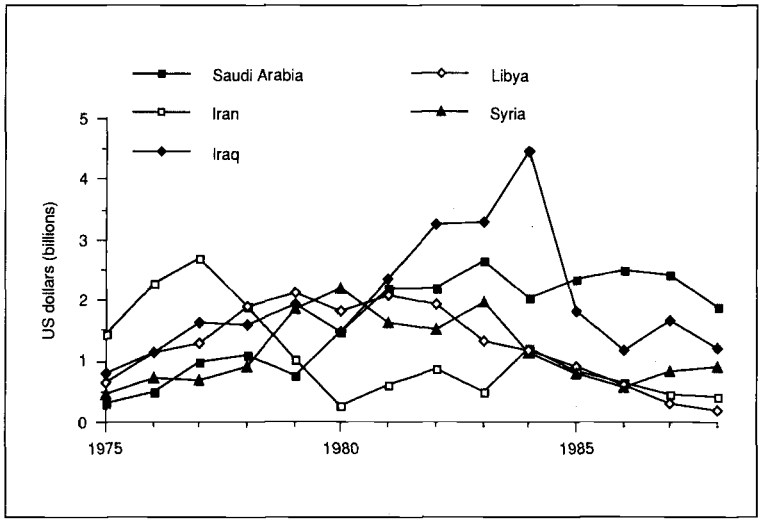

Figure 9. Five leading arms-importing countries, 1975–1988 (1978 constant US dollars). Source: Supplement 10.

It is significant that, for the 1985–1988 period, Iran and Libya ranked last among the importing countries of the Middle East, whereas Saudi Arabia recaptured its role as a major player in the Middle Eastern market, followed by Iraq and Syria.[5]

Between 1984 and 1988, the main clients of the USSR, according to SIPRI (see SIPRI 1989: 208), were Angola, India, Iraq, Libya, and Syria; these countries received 75% of all arms exports from the USSR. The USA was in a similar situation, with Egypt, Israel, Pakistan, Saudi Arabia, and South Korea receiving 63% of its exports. It is noteworthy that India, Iraq, and Saudi Arabia represented 50% of the French market, and that Egypt, Iran, Iraq, Pakistan, and Saudi Arabia represented 88% of the Chinese market. The past few years have seen significant changes, however. India,

[5] A recent report by Richard Grimmett of the Congressional Research Service notes the continuing importance of the Middle East in arms purchases from 1982 to 1989. Saudi Arabia and Iraq were the two largest importers ($44.2 billion and $42.8 billion respectively). Iran placed fourth with $17 billion and Syria fifth with $15.6 billion. During this period, the Middle East was responsible for almost 30% of world imports. (See editorial in the *New York Times* of 2 March 1991 (p. 22).)

Table 11. Six leading arms-importing countries, world and Middle East (ME) markets (billions 1978 constant US$).

	1965–1988			1985–1988		
	Billions $	World share (%)	ME share (%)	Billions $	World share (%)	ME share (%)
Iraq	30.8	9.0	21.4	5.9	8.0	21.0
Saudi Arabia	25.6	7.5	17.8	9.2	12.6	33.0
Iran	20.3	5.9	14.1	2.3	3.2	8.3
Syria	20.3	5.9	14.1	3.1	4.2	11.0
Libya	18.8	5.5	13.0	2.0	2.8	7.3
India	18.7	5.5	–	8.3	11.3	–
ME	115.8	33.9	80.4	22.5	30.8	82.1
World	1 344.5	39.4	–	30.8	42.1	–

Source: Supplements 10 and 10A.

with 12.7% of the world total, has become, immediately after Saudi Arabia, the second arms importer in the world.

This period has also been characterized by a greater diversification in suppliers: Europe is naturally continuing to corner a part of the market that used to be almost a US monopoly, and China is following suit, developing special relations with Egypt, Iran, Iraq, Pakistan, and Saudi Arabia. As a result of the Iran–Iraq cease-fire, the Iranian demand for arms may decline, although Iran will have to rebuild and modernize its armies, and China may return to its more traditional clients such as Pakistan and North Korea. However, China is not neglecting its relations with the industrialized countries, on whose support it is counting to pursue its efforts at modernization. In the military field, major agreements have recently been signed with Australia, France, Italy, and the USA, in particular concerning avionics (see SIPRI 1989: 208).

The recent, more relaxed, climate in international relations, multilateral efforts to reduce the scale of regional conflicts, and the renewed vigour of the UN Security Council are all factors

that may cause the arms industries to put pressure on their respective governments to liberalize military trade regulations. This situation could be favourable to the revival of the bilateral talks on limiting arms transfers (the famous "Conventional Arms Transfers Talks," or CATT) that were sacrificed on the altar of bureaucratic arguments in Washington and became bogged down in total misunderstanding with Moscow.[6] However, judging by what little progress has been made in talks aimed at establishing a system for controlling missile-related technology transfers,[7] we would certainly be justified in believing that it will be several years before effective restraints in this area can be established and the disastrous situation of regional conflicts improved.

Before analyzing the relationships between military spending and arms transfers, it may be useful to examine (as we did for the exporting countries) the ratio of military imports to total imports for the recipient countries. For 1970 to 1988, military trade accounted for an average of 7.4% of all imports in the net importing countries. More recently, for 1980 to 1984, the value reached 8%, and stood at 7.4% for 1985 to 1988.

The most volatile region is clearly the Middle East with military imports accounting for 17.5% of all imports to this region between 1970 and 1988. For the more recent period, 1985–1988, the arms trade remained at 17.8% (Supplement 12). Another noteworthy fact is that, for the 1980–1984 period, the percentages for Asia and Africa were also very high, 9.0 and 10.2% respectively (for 1985–1987, these figures fell to 5.8 and 5.1%, respectively). In other words, North–South trade has been undergoing increased militarization at the expense of commercial exchanges that could be more advantageous to the economic development of these countries.

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6 In this regard, see Pierre (1982) and Husbands and Cahn (1988). CATT negotiations were held in 1977 and 1978 between the USSR and the USA, with the latter wishing to discuss restraints in arms transfers to Latin America and sub-Saharan Africa, while the USSR wished to include east and west Asia, to the great distress of Presidential Adviser Z. Brzezinski.

7 The purpose of the MTCR (Missile Technology Control Regime) talks is to stop the proliferation of ballistic vectors capable of transporting "a useful (nuclear) load of 500 kg to within a range of 300 km" (see SIPRI 1989: 288).

Arms transfers and military spending

As mentioned by Fontanel and Guilhaudis (1988: 219), although it is true that the value of all arms transfers is between 3 and 5% of world military spending,[8] this indicator takes on an entirely different meaning if we apply it to the net importing countries only. For these 91 countries (Supplement 13), 25% of military spending, on average, went toward arms imports, at least for the 1965–1988 period. Between 1980 and 1984, military imports represented an average of 37% of military spending, which illustrates the growing cost of equipment in military budgets. Furthermore, this percentage varies enormously from region to region and country to country.

From 1965 to 1988, the proportion of the total military budget spent on imported arms for the 10 leading countries is shown in Table 12 (Supplement 13). Between 1985 and 1988, three countries had military imports that were higher than the overall level of their military spending: Cyprus (205%), Uganda (117%), and Chad (126%). Four other countries spent more than half their military budget on purchasing military equipment: Guinea (74%), Jordan (53%), Mali (98%), and North Yemen (73%).

These figures demonstrate that, for most domestic wars, the cost of imported equipment largely exceeds the military budget of the countries in question. It is also a measure of the degree of

[8] Our data for the 1965–1988 period (Appendix and Supplements 7 and 10) indicate that, for the net exporting countries, military trade represented 4% of world military spending and, for the South importing countries, 2.5%.

Table 12. Arms imports as percentage of total military spending for top 10 net arms-importing countries, 1965–1988.

Afghanistan	175.25	Syria	68.40
Ethiopia	141.25	North Yemen	64.66
Somalia	131.96	Mali	62.87
Libya	117.61	Cyprus	56.27
Bénin	77.34	Chad	53.11

Source: Supplement 13.

their dependence on the outside world. More seriously, however, the import of military equipment puts a strain on the budgets of the importing countries and, thus, may have a marked effect on their foreign or long-term debt. According to certain sources, 20% of all loans granted to the Third World between 1972 and 1982 went toward arms purchases (SIPRI 1985: 448). Quoting a study by Brzoska ("The accumulation of military debt." Research Centre on War, Disarmament and Development, Hamburg University, Hamburg, Germany. Working Document 7), Ohlson (1988: 8) estimates that 10% of Third World debt is attributable to the purchase of military equipment. We do not have any figures on debt in constant dollars.

Percentage of imports represented by military equipment

The ratio of imports of military equipment to a country's total imports is doubtless a better indicator of economic vulnerability than the relationship between military imports and military spending. Between 1970 and 1988, military imports accounted for over 10% of total imports for the 12 countries shown in Table 13.

All the countries strongly dependent on the outside world, that is, those who at some time or other have been at war during the 1980s, have purchased arms amounting to more than 25% of their total imports. These are Afghanistan, Ethiopia, Iraq, Libya, Somalia, and Syria. In recent years, North Korea appears to have replaced Libya as a significant military importer. Furthermore, all these figures indicate an even more disturbing trend: the ratio of military imports to world imports was 7% for the overall 1970–1988 period, and 8% between 1980 and 1984. For the 1985–1988 period, the figure remains very high at 7.4% (all figures have been taken from Supplement 12). The Middle and Near East are obviously the two regions most severely affected by the phenomenon of militarization in world trade. Although between 1985 and 1988 the traditional Middle Eastern buyers were active, there was a new country with a relatively high ratio of military equipment imports: India.

Table 13. Military imports as percentage of total imports.

1970–1988		1980–1984		1985–1988	
Ethiopia	64.5	Ethiopia	94.2	Afghanistan	128.2
Afghanistan	56.0	Afghanistan	71.2	Ethiopia	75.6
Syria	53.9	Syria	64.4	Nicaragua	57.2
Somalia	36.2	Iraq	42.0	Iraq	47.8
Iran	28.7	Somalia	40.9	Syria	40.2
Iraq	28.3	Libya	35.2	North Korea	24.5
Libya	24.4	Jordan	24.8	Libya	20.1
Egypt	22.5	Cuba	18.2	India[a]	17.7
North Yemen	20.5	Egypt	14.6	Iran	17.3
Nicaragua	19.4	North Korea[a]	13.5	Saudi Arabia[a]	17.0
North Korea	17.3	Guinea[a]	12.4	Somalia	16.2
Jordan	16.7	Congo[a]	10.2	Jordan	14.2

Source: Supplement 12.

[a] Newly significant military importers.

Relationship between development assistance and military spending

In absolute terms and in current dollars, assistance rose from $10.3 billion in 1965 to $84.8 billion in 1984, reaching a record figure of $89.7 billion in 1981 and dropping to $48.9 billion in 1987 (Supplement 14; current US dollars). The year 1988 was disastrous with the level of assistance dropping drastically to $14.3 billion. Not since the end of the 1960s has such a low level been recorded.

In 1978 US dollars, cumulative assistance supplied between 1965 and 1987 amounted to $1.07 trillion (see Supplement 14A), $0.48 trillion of which was provided from 1980 to 1987 only.

Assistance dropped significantly in the early 1980s [Figure 10]. From 1965 to 1975, the USA bore most of the burden of development assistance [Figure 11]. Most of the other major industrialized countries became fully involved only after the oil crisis of 1973. In 1975, the two principal donors were the USA and the Federal Republic of Germany, followed by France and Japan.

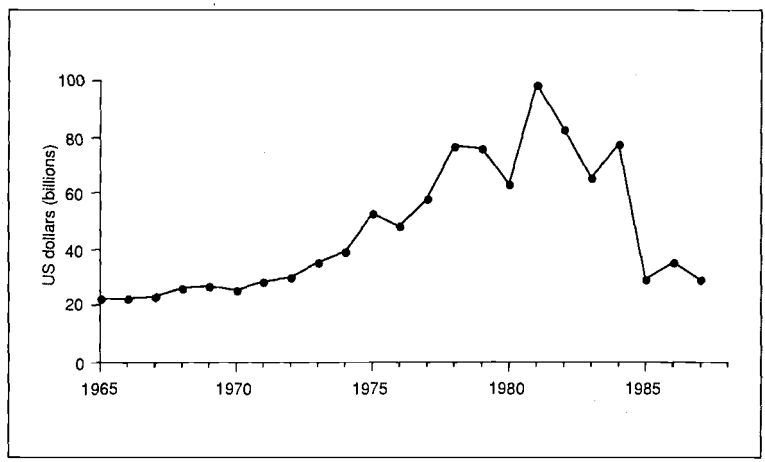

Figure 10. Total world aid, 1965–1987 (1978 constant US dollars). Source: Supplement 14A. Note: Data are not available for 1988 but would probably show a marked reduction.

The situation between 1975 and 1987 shows the growing importance of donor countries such as France, the Federal Republic of Germany, and Japan, while the United Kingdom's share has decreased substantially [Figure 11]. Throughout the 1975–1987 period, the USA was still, by far, the primary donor. From 1978, the level of assistance from Japan is noteworthy — exceeding the Canadian defence budget for the same period!

The situation is somewhat different for assistance received because, although the basic sample includes 74 countries, this was not sufficient to produce a balance between assistance provided and that received.[9] From 1965 to 1987, assistance received (in 1978 constant US dollars) rose from $13.4 billion to $41 billion, that is, by a factor of three (Supplement 20A). For the entire 1965–1985 period, the cumulative total of assistance received was $679.3 billion.

The regions to receive most assistance were, in descending order, Asia, Africa, South America, the Middle East, and Central

[9] This is basically the result of the sampling method used. Because statistics for countries at war or experiencing prolonged famine are not very reliable, only those countries with reliable statistics were used in sampling. Nevertheless, our statistics make it possible to account for 70% of all assistance given between 1965 and 1985.

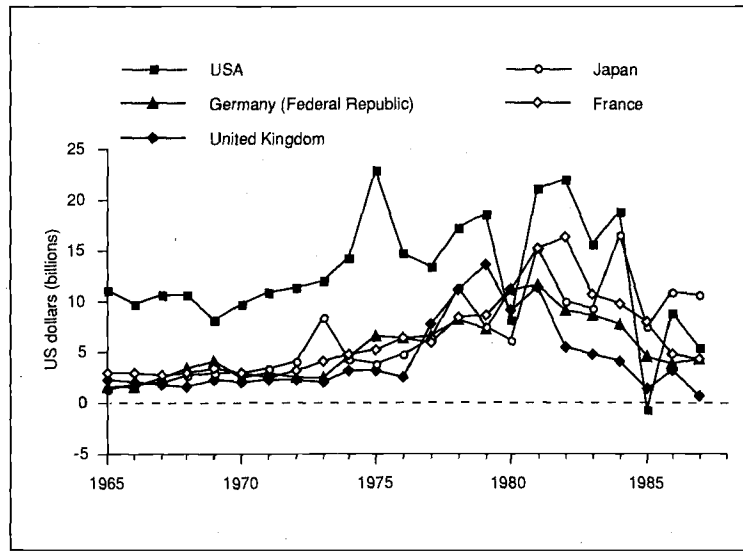

Figure 11. Five leading aid donor countries, 1965-1987 (1978 constant US dollars). Source: Supplement 14A.

America (Supplement 20).[10] Between 1985 and 1988, Asia received assistance of $40 billion, Africa $33.6 billion, South America $18.1 billion, and Central America $4.8 billion (in 1978 constant US dollars).

We can also compare changes in assistance provided by the North as a function of military spending, and the relationship between assistance received and military spending by the South. The relationship between assistance provided and military spending from 1965 to 1988 reveals fundamental differences between countries. For Switzerland, notably, the ratio was 81.6%; assistance from Japan equalled 77.9% of that country's military spending. These figures are fairly surprising, and we can only regret that the trend was not more widespread. For the OECD countries as a whole, the ratio of assistance to military spending was about

[10] Between 1980 and 1984, these regions received the following proportions of assistance: South America, 24.5%; Asia, 23.3%; Africa, 21.6%; Central America, 12.3%; and the Middle East 10.1%.

Table 14. Assistance as percentage of military spending for donor countries, 1965–1988.

Switzerland	81.7	Norway	29.4
Japan	77.9	United Kingdom	27.7
Belgium	42.9	Italy	27.3
Canada	38.2	Germany (Federal Republic)	24.6
Netherlands	37.3	Finland	22.9
Austria	35.5	New Zealand	21.9
Denmark	33.4	Australia	21.1
France	32.6	USA	9.2
Sweden	31.4		

Source: Supplement 18A.

Note: Assistance provided and military spending in current dollars.

17.8%. Percentages for other countries during the same period are shown in Table 14.

In this context, we must obviously consider the international responsibilities of the USA, which explains the low ratio between that country's assistance and military spending. It could also be said that the USA is not that far removed from the average of the OECD countries; however, it must also be considered that this average has dropped precisely because of the USA. One might almost be tempted to conclude that, once the superpowers are ready to spend as much on assistance as on their own security, the international system might be influenced by the "peace by right" model or by the third, "transsystemic," model described earlier. However, this is not likely to occur in the near future as, for 1985–1988 alone, the ratio of assistance to military spending was only 8.25% for all the donor countries, and 2.3% for the USA (Supplement 19A). This significant decline calls to mind the late 1960s, when the world was still enmeshed in the Cold War.

Over the same period (1965–1988), military spending in the North increased 1.6 times, from $301 billion per year to $493 billion, while that of Third World countries increased 3.2 times, from $27.6 billion per year to $87.9 billion (from Appendix; 1978 constant US dollars). This would seem to indicate a gradual militarization

of the South. It is just as clear that the South's military growth far exceeded the assistance it was receiving. The situation is even more serious because, according to the World Bank's International Monetary Fund (IMF) Development Committee, financial transfers (all contributions) with the Third World had changed from a net inflow of $34 billion in 1981 to a net outflow of $22 billion in 1987, a swing of $56 billion dollars (*Nouvelles Nord–Sud*, Ottawa, Spring 1989, No. 8). Foreign debt and militarization constituted the two most serious problems faced by the South during the 1980s.

However, generalizations cannot really be made in this regard as there are no directly observable links between assistance received by the regions and their military spending. Table 15 illustrates this very well. Possibly the most troubled region in the world, the Middle East, received relatively little assistance in relation to its military spending.

Of the whole period in question, 1980–1984 seems to indicate a slight improvement for South and Central America, where assistance increased in relation to military spending. It is, however, no great consolation, because ratios deteriorated from 1985 to 1988, except for Africa. These ratios reflect the generally drastic drop in assistance during the same period. In absolute terms, the regions that spent most on military equipment were, in descending order, Asia, the Middle East, South America, Africa, and Central America, at least between 1965 and 1988. With respect to assistance, the ranking was Asia, Africa, South America, the Middle East, and Central America.

Statistically speaking, there are thus no significant direct relationships between assistance and military spending. We have examined the 25 countries that received most assistance (the five leading countries in each region — for Africa, Bénin, the Central African Republic, Liberia, Niger, and Sierra Leone; for Central America, Haiti, Honduras, Jamaica, Mexico, and Panama; for South America, Bolivia, Brazil, Colombia, Ecuador, and Paraguay; for the Middle East, Cyprus, Egypt, Jordan, Lebanon, and North Yemen; and, lastly, for Asia, Indonesia, Nepal, the Philippines, Sri Lanka, and Thailand.). This proportion was expressed as the ratio of

Table 15. Assistance received in relation to military spending by region (billions of current US dollars).

	Africa	Central America	South America	Asia	Middle East	Average
1965–1988						
Assistance	149.2	67.5	138.1	172.8	102.3	
Military spending	98.0	24.4	123.4	730.0	649.3	
Ratio	1.52:1	2.76:1	1.21:1	0.24:1	0.16:1	1.16:1
1980–1984						
Assistance	57.9	41.5	66.7	65.4	41.2	
Military spending	38.6	9.7	38.6	192.0	311.0	
Ratio	1.50:1	4.26:1	1.73:1	0.34:1	0.13:1	1.59:1
1985–1988						
Assistance	33.6	4.8	18.1	40.0	20.3	
Military spending	13.9	5.1	26.4	130.0	133.1	
Ratio	1.75:1	0.69:1	0.51:1	0.31:1	0.15:1	0.68:1

Source: Supplement 19 for military spending and Supplement 20 for assistance.

assistance received to military spending (Supplement 18). With the exception of Bénin and Ecuador, none of these countries appears on the list of those most burdened by the percentage of arms imports to military spending, and only Egypt and Jordan appear on the list of countries where military trade plays an important role in total imports and on the list where the ratio of assistance received to military spending is high. For these two countries, the situation is perfectly understandable. As for Bénin and Ecuador, two countries out of 25 is not very significant.

Generally speaking, although there are no direct links between assistance and military spending, countries involved in regional conflicts must often rebuild their economies once the conflict is over; like natural disasters such as drought and flooding, this has a direct effect on the total demand for assistance. Equally, countries that can assume the costs of importing military equipment

divert considerable amounts of hard currency that could be reinvested elsewhere to more productive ends.

These conclusions indicate that, in contrast to the statements of the "realist" and "neorealist" schools of international relations, countries do not always base their assistance on geopolitical considerations. On the contrary, assistance seems to be given on a truly humanitarian basis, which would indicate that the models of "peace by might" and "peace by right" can coexist without too much difficulty. As pointed out earlier, nations should try in the future to defend policies aimed at containing the most destructive effects of the first model, that is, to limit the arms race and reduce military spending, and to increase international assistance and cooperation.

Chapter 7
Conflicts in the Third World and the North

In general, the most interesting studies on international conflicts were conducted in the 1960s and 1970s. Those by Bloomfield and Leiss (1969), Barringer (1972), Kende (1972), Bouthoul and Carrère (1976), and Singer (1979) are the best known — of course, these authors continue in the tradition of Lewis Richardson, Pitirm Sorokin, and Quincy Wright. In 1976, Blechman and Koplan published a much-quoted work on the use of force as a political instrument, but to my knowledge, except for the very interesting work by Kaye et al. (1985) — 90 studies on conflicts are quoted in this report, but only a few were published after 1976 — and a few issues of the French review *Polémologie*, which often publishes very useful features on world violence, no major comprehensive works on war statistics have been published since. In our comments on war and the evolution of conflicts in the Third World, we will, therefore, be drawing mainly on the study by Kaye et al. (1985).

The fact that war is destructive was something we already knew. The two World Wars alone caused more deaths than the 500 conflicts recorded between 1721 and 1985 — according to Kaye et al. (1985: 28), World War I resulted in 13 million deaths; World War II, 38 million; and the Taiping Rebellion ("The Great Peace") in 1851, 11 million. What is less well-known, however, is that several conflicts since 1945 have each caused over one million deaths — Cambodia, 3 million; Korea, 2 million; Vietnam, 1.8 million, Bangladesh, 1.5 million; Nigeria–Biafra, 1.1 million; and the Iraq–Iran war, probably between 0.5 and over 1 million — and that the total number of deaths resulting from conflicts since 1945

certainly exceeds 10 million. For the period between 1961 and 1979 alone, the number is 9.5 million (Legault 1983). If we were to take into account the particularly dramatic period of the Chinese civil war in 1949 and all other conflicts involving loss of life that have occurred since 1980, the figure could very well reach between 10 and 20 million. Losses incurred during World War II represented, over 6 years, 1.5% of the population or 0.25% per year, while the birth rate at the time was 2% per year.

We also know that, from 1951 to 1985:

- There were 174 conflicts lasting an average of 5 years;
- There were more domestic wars (some with considerable external participation) than international wars;
- The regions most affected by the number of conflicts were, in descending order, Africa, Asia, the Americas, and the Middle East; and
- The "initiator" of the conflict emerged victorious 21.3% of the time, went down to defeat 34.5% of the time, and achieved a compromise in 19.5% of all cases. The outcome was uncertain or unknown in 24.7% of the cases because some of the conflicts under study had not yet ended (Kaye et al. 1985: 37, 43, 49, and 52).[1]

These statistics are consistent with those in a study by Grant and Lindsey (1988) that show that, for the instigator, the probability of winning a war was 50% between 1700 and 1900; that the figure fell to 33% between 1900 and 1950; and that it was only 25% between 1950 and 1985.[2] Not only does war cost lives, but it is not worthwhile. Furthermore, the same study shows that regional conflicts have

[1] With respect to the length of wars (Kaye et al. 1985: 36), the average was 64 months during the 1950s, 74 months during the 1960s, and 48 months during the 1970s. The authors showed that the average length for the mid-1980s was 20 months. The latter value will probably have to be reviewed at the end of the war in Afghanistan, the Iraq–Iran war, and the war for control of Cambodia.

[2] It is difficult here to compare statistics from various works on conflicts, as they do not always bear on the same periods or the same conflicts. For example, for the 1816–1974 period, Bueno de Mesquita (1981: 153) estimates that countries that instigated war when their power gave them the advantage of "expected utility" won the war 83% of the time. As regards perception, for the 278 crises studied by Wilkenfeld et al. (1988: 205) for the 1929–1979 period, the authors conclude that 38% of the 627 players involved felt they emerged victorious from the crisis.

tended to shift about 12 degrees toward the south; the same concept is described by Brzezinski as an "arc of crisis" and extends from the Near East to northeast Asia, taking in Iran, Afghanistan, India, and southeast Asia.

The reason behind these morbid remarks is not to underline the extent and the seriousness of conflicts in the Third World, but to identify the main lessons that can be learned from East–West rivalries where conflicts and opposition are concerned, and to emphasize North–South interdependence with respect to conflicts.

In the North, it is true that the nuclear deterrent has forced a certain amount of thought in East–West relations. However, to conclude blithely that the industrialized countries have not gone to war because they have been able to live under the "shade of the nuclear umbrella" is a bit hasty. It will never be possible to demonstrate the theory of nuclear deterrence, even though the maxim *si vis pacem para bellum* is still topical.

This maxim, like nuclear deterrence, is based on the contradictory hypothesis that countries must arm themselves in peacetime to maintain that peace. For most people, however, peace involves disarmament, and war involves armament. The two most serious crises that have affected the "polarized" world were clearly the Cuban missile crisis of 1962 and the general nuclear alert of the American forces during the 1973 October War. The successive crises in Berlin of 1958 and 1961 could also be mentioned here. Although the term "arms control" first appeared in official texts on disarmament during the 1955 Geneva Summit — and probably in the early 1960s in university and public administration documents (Klein 1989) — since 1962, the superpowers have made every attempt to prevent the outbreak of a nuclear war and to ensure that, should nuclear deterrence fail, the most devastating effects of a nuclear war would be limited. Such measures vary from the installation of a "hotline" in 1963 to the *1987 Agreement* on the establishment of nuclear-risk reduction centres, and include the *September 1971 Agreements* on improving communications between the superpowers in times of crisis, measures intended to reduce the risk of nuclear war, the *Agreement of May 1972* on preventing

incidents on the high seas, and the *June 1973 Agreement* on preventing nuclear war.

There is no doubt here that the "brink-of-the-abyss" policy is no longer a useful means of managing conflicts, and that the superpowers now realize more than ever that certain methods designed to guarantee their security could one day have the opposite effect. Many things changed between Hiroshima and Chernobyl, one of the most important being Gorbachev's "declaration of peace" toward the West. "Peaceful coexistence" is no longer subject to the principles of the class struggle when the ecology of the planet is at stake, or when the concept of the inevitability of war must be fought by all possible means.

With respect to strategy, the two blocs have agreed to limit or reduce their most offensive air and land capabilities as part of the CFE talks — negotiations on Conventional Armed Forces in Europe in Vienna (the former acronym, CAFE, was replaced as some participants felt that the name "the CAFE of Vienna" was not very serious!) — and the West is now undertaking major diplomatic efforts to make sure these agreements will also be respected by the new republics in the framework of the Commonwealth of Independent States (CIS). Other changes were apparent even before the breakup of the Soviet empire. For example, "nonprovocative" defence was also the result of the troubling conclusions the world has drawn from the accident at Chernobyl. Even in a war begun in a purely traditional manner, the European industrial infrastructure is now too vulnerable, given the risks of nuclear, chemical, and industrial pollution, to risk any kind of conventional conflict. The Soviets admitted as much in their first report on the consequences of the Chernobyl accident, submitted to the IAEA, and have repeated it since. In nuclear matters, a START agreement was signed in July 1991 and other substantial unilateral reductions were announced in January 1992; these were followed by the startling agreement in June 1992 under which Russia and the USA agreed to cut their nuclear arsenals to 3 000 and 3 500 warheads respectively by the year 2003. The major problem for the West will be to make sure that every republic now in the CIS will respect the treaties

signed by the former USSR, such as the NPT (nonproliferation treaty), and to institutionalize bureaucratic control on the transfer of sensitive technology to other countries.

As part of the follow-up to the Conference on Security and Cooperation in Europe (CSCE) — once known as the CCSBMDE (Conference on Confidence and Security Building Measures and Disarmament in Europe) — unprecedented confidence and security-building measures have been taken to make military operations and activities in Europe more open and less ambiguous. The disappearance of the former Soviet military "glacis" in Central Europe has removed the threat of a swift military action in that area, and most of the future measures will be designed to increase greater military transparency in those areas. The INF agreements (December 1987, ratified by the USSR in the summer of 1988) as well as the START agreements are very demanding with respect to verification and on-site inspections. We are, thus, far removed from the situation of the 1950s and 1960s, when the USA was doing its utmost to break through the Soviet borders by means of spy planes. Today, we are witnessing a gradual transformation of the old antagonisms into relationships based on positive action, with suspicion giving way to trust, and trust to cooperation.

These transformations are just as evident in the West. Undoubtedly, the first democratization of the strategic debate dates back to the time of US Secretary of Defense Robert S. McNamara, who felt that military matters were too important to be left solely to the discretion of the military. Since that time, the statements of various churches and bishops, of certain labour movements, and the increasingly critical attitude of a Congress that is now unwilling to grant everything demanded of it in the name of security or the vital need to reestablish US leadership have brought about a democratization of the debate that no one would have predicted even 10 years earlier. Better than anyone, strategists realize that nuclear deterrence is "sick," that it is becoming increasingly less credible at a time when nuclear parity is perfectly established. Wisdom rather than technology must be used to ensure security; in other words, security must be maintained at the lowest cost

possible and through positive action, such as arms control, instead of through the endless spiral represented by the search for strategic superiority.

In general, there are four different types of conflicts that have had a more or less direct effect on North–South relations. First, there were the bitter bilateral conflicts between the superpowers (Korea, Cuba, and Berlin), which some have called "systemic." Not only have these brought the planet to the brink of the abyss several times, but they have also exacerbated other conflicts in the Third World and raised the stakes in the "game" between the superpowers to win the allegiance of other countries. The rivalry among the superpowers thus resulted in military alliances without necessarily creating "communities of security," to use an expression made famous by American political pundit Karl Deutsch. In the main, these events produced communities of insecurity, which doubtless stirred up regional conflicts instead of reducing them.

A second type of conflict resulted from the division of several countries after World War II. The case of Germany has now been settled, although economic dissatisfaction is widespread in the former German Democratic Republic. On the other hand, the reunification of Vietnam was a disaster for southeast Asia from both an economic and human point of view, and it is anyone's guess what would happen in the event of reunification of North and South Korea, two countries where militarism is strongly entrenched. It is, however, certain that reunification of the two Koreas could revive old antagonisms between Korea and Japan and, consequently, increase the possibility of regional conflict.

A third type of conflict involves the severe polarization of relations between the main rivals in a given region. Examples here abound, the best known being Israel and its Arab neighbours, Iran and Iraq, India and Pakistan, and Brazil and Argentina. Despite the recent calm in several of these regions, the spectre of nuclear proliferation, delivery systems capable of taking nuclear warheads to the enemy, and the possible proliferation of the "poor man's nuclear bomb" — chemical and bacteriological weapons — could all have incalculable consequences on North–South relations.

In this regard, although there are writers who insist that "more may be better" (what French general Pierre Gallois had already anticipated when he spoke of the "equalizing atom"), most observers are justifiably concerned about the threat of nuclear proliferation. Despite the three review conferences on the nonproliferation treaty, the last of which was a failure, uncertainty and doubt remain as to the ability of the international community to eliminate nuclear proliferation. Nonetheless, we may congratulate ourselves that several countries with nuclear arms are making every possible attempt to extend "full-scope safeguards" to as many countries as possible, and on the possibility that certain recalcitrant nations, such as Taiwan, may be persuaded to sign the nonproliferation treaty. In this regard, however, it would appear difficult to avoid nuclear proliferation in the long term unless those countries with nuclear arms do more to reduce their own arsenal. Only increased efforts will make it possible to envisage arms-control theories being applied in the southern hemisphere.

As for possible proliferation, no argument or hypothesis can be excluded. One of two things is likely, however: either the superpowers would distance themselves from their respective allies if the unavoidable occurred (and in these conditions, certain allies would be in danger of being abandoned), or the superpowers would do everything they could to impose a settlement on the conflict, with or without the regional participants agreeing — as occurred in the Gulf. One thing is certain: if just one nuclear weapon were employed, the danger of radioactive contamination would be greater if the explosion took place in the northern hemisphere rather than in the southern, given that the prevailing winds come from the east. In either case, however, everyone would be exposed to some extent in the long term. In the end, the double crisis of "decoupling" and "settlement imposition" could only result in the "implosion" of the region in question and the need to decontaminate it afterwards. Such a task could well surpass all available means of coping with nuclear accidents.

Some authors also emphasize the dangers of a more or less automatic escalation between the superpowers in the event of a

nuclear conflict between two regional countries. We do not feel this is a very realistic hypothesis, given the climate of heightened cooperation that the superpowers seem to be establishing among themselves. Although this theory obviously cannot be rejected out of hand, the first two seem more convincing, even in the event of considerable tension between the superpowers. The latter are becoming increasingly aware of the threat of nuclear arms in a conflict, and of the futility of using them to achieve a negotiated political solution.

A fourth type of conflict involves the "pariah" countries, or those that have been more or less ostracized because their domestic policies in relation to universally recognized human-rights standards, are deemed intolerable. South Africa is the best example here, but other countries could also be added to this disreputable list, if the rights of ethnic majorities in certain areas continue to be violated in the name of the survival of existing regimes and policies.

In general, the result of these four types of conflict is to introduce serious distortions within the system, and certain cooperative transsystemic, intersystemic, and intrasystemic relations cannot then be normalized. The first and second types cause a freeze in the parameters of the status quo, the third indicates an equally obvious problem at the regional level, and the fourth makes regional opposition forces more radical, which again merely nullifies any attempt at accommodation or rapprochement that the more moderate elements would like to make. In all cases, too, the multiplication of local and regional conflicts throughout the world has helped to accelerate the militarization process, at the expense of economic growth and the development of structural relations capable of encouraging a better integration of nations within the "transsystemic" model analyzed above.

For almost two decades, however, a new "low-intensity" but high "media density" form of conflict has appeared. International terrorism now holds a particular place in the analysis of conflicts. We, therefore, feel it would be useful to devote part of this book to analyzing this problem.

Chapter 8
The Terrorist Dimension

There are over 5 000 works on international terrorism (Lakos 1986) and, in Canada, the Secretariat of the Solicitor General's Office has recently published a major bibliography on this subject (Canada, Solicitor General 1990). We do not intend to deal extensively with the problem here, but rather to identify new dimensions of the terrorist threat as regards North–South security.

Growth of terrorism

Terrorism, which is an enemy of freedom for some and a symbol of political liberation for others, is hard to define because it has so many faces. Everyone agrees that it consists of premeditated, deliberate violence directed against symbolic targets, and that its objectives are political in nature — this definition resembles that of Manor (1989). According to Marie-France Toinet (1989: 112), expert Walter Laqueur (1987: 72–73) has absolutely no chance of being listened to when he writes:

> *Terrorism ... has been waged by national and religious groups, by the left and by the right, by nationalist as well as internationalist movements, and it has been state-sponsored.... Terrorist movements have frequently consisted of members of the educated middle classes, but there has also been agrarian terror, terror by the uprooted and the rejected, and trade union and working-class terror .... Terror has been directed against autocratic regimes as well as democracies .... Movements of national liberation and social revolution (or reaction) have turned to terrorism after*

political action has failed. But elsewhere, and at other times, terrorism ... has been chosen by militant groups even before options were tried.

This complex view of the matter is obviously far from the oversimplification that "the most powerful totalitarian state of our time also provides most of the support and financing for international terrorism" (translation; Toinet (1989) quoting Jeane Kirkpatrick). At one time, this was probably fairly true, but today it is more or less false. Furthermore, counterterrorist operations raise problems of their own, and this raises the issue of the end result of violence. Although counterterrorism does claim its own victims, this at least is not the result of premeditation, in contrast to violence by "indiscriminate victimization" (a term borrowed from Manor).

Having established these differences, there is still no consensus from country to country on how to define terrorist operations. As Leszek Kolakowski (1986: 48 quoted in Manor 1989: 113) has already stated, "Our uncertainty as to [knowing] when to use the term terrorist represents the other side of our confusion about the concept of legitimacy" (translation). Should we, for example, include the actions of deranged individuals whose motives are psychopathological in nature? Or operations that are more criminal than political, even if the means employed are often the same, such as hostage-takings, explosives, and bombings? We can see how distinctions may vary from one country to another, which to a large extent explains the variations in statistics on terrorist violence.

Furthermore, the definitions used by the US Central Intelligence Agency (CIA) and the US Department of State (USDS) have changed with time; certain categories of events have been dropped, and others added (in this regard, see the basic study by Anthony Kellet (1988)). Comparisons by period are thus subject to several random variables, but the figures nonetheless speak for themselves. In 20 years, terrorism struck over 13 100 times and claimed 26 172 victims: 8 053 dead and 18 119 wounded. This is both

a considerable number and yet not very many. It is not many in relation to the number of deaths caused every year by conflicts and rivalries, but it is a significant number of ordinary citizens and travelers.

The values in Table 16 show that, except for the years 1980–1984, the number of deaths has increased steadily for the 5-year periods from the 1970s, with 1985–1989 being the most serious of all. There has also been a constant increase in the number of injured, and this has been particularly marked over the past decade. However, terrorism showed a significant decrease during 1989 and it is probable that 1990 will continue this trend. In spite of this, overall, the 1985–1989 period will have taken more lives than any other period in the entire history of modern terrorism.

The evolution of terrorism can also be considered in terms of the relationship between the number of dead and injured to the number of terrorist incidents during the same period [Table 17].

However one defines terrorism, statistics indicate that this modern-day plague is on the rise, with the average number of victims being 2.6 individuals per attack during the period 1985–1989. Although we are witnessing a fierce struggle between pro- and antiterrorist forces, it would be premature to predict the outcome of that struggle. The democracies are becoming increasingly cooperative in their fight against terrorism; at the same time, however, the means used by terrorist organizations are also becoming more sophisticated and difficult to detect, especially with the use of plastic explosives. In some cases, the explosives can only be obtained with the help of certain countries. If, as some people hope, East–West cooperation in the antiterrorist struggle increases over the coming years, the probability of successful aircraft hijackings will decrease between 1990 and 1995. Although this phenomenon will not alleviate some seemingly interminable regional conflicts, such as those in Northern Ireland and Palestine, terrorist organizations in general may find they are receiving little support from countries they were able to count on in the past.

Table 16. Number of terrorist incidents, dead, and injured, 1968–1989.

	No. of incidents	No. of dead	No. of injured	Total victims
1968	142	35	208	243
1969	214	64	202	266
Subtotal	356	99	410	509
	(2.7)[a]	(1.2)	(2.3)	
1970	391	131	212	343
1971	324	36	227	263
1972	648	157	413	570
1973	564	127	551	678
1974	528	344	1 100	1 444
Subtotal	2 455	795	2 503	3 298
	(18.7)	(9.9)	(13.8)	
1975	475	276	748	1 024
1976	599	415	920	1 335
1977	562	261	461	722
1978	850	442	690	1 132
1979	657	738	664	1 402
Subtotal	3 163	2 132	3 483	5 615
	(24.1)	(26.5)	(19.2)	
1980	760	642	1 078	1 720
1981	709	173	824	997
1982	794	140	814	954
1983	500	650[b]	1 273	1 923
1984	597	312	1 000	1 312
Subtotal	3 360	1 917	4 989	6 906
	(25.6)	(23.8)	(27.5)	
1985	782	825[c]	1 217	2 042
1986	785[d]	604	1 717	2 321
1987	832	633	2 272	2 905
1988	856	658[e]	1 131	1 789
1989	528	390	397	787
Subtotal	3 783	3 110	6 734	9 844
	(28.9)	(38.6)	(37.2)	
Total	13 117	8 053	18 119	26 172

Source: Based on data from Kellett (1988: appendix F) and USDS (1989: 4–5)

[a] Values in parentheses are percentages of column total.
[b] Includes the 296 Marines killed in Beirut.
[c] Includes the Air India explosion.
[d] Calculation based on graph in USDS (1989: 2).
[e] Includes explosion on Pan Am flight 103 (21 December 1988).

Table 17. Ratio of dead and injured to number of terrorist attacks.

	Number per attack		
	Dead	Injured	Victims
1970–74	0.32	1.02	1.34
1975–79	0.67	1.10	1.77
1980–84	0.57	1.48	2.05
1985–89	0.82	1.78	2.60
Total (1968–89)	0.61	1.38	1.99

Source: Table 16.

Statistics on aircraft hijackings, because they are so dramatic, are probably more reliable than general statistics on terrorist attempts. Here, too, however, definitions vary from country to country. Furthermore, the problems involved in deciding what constitutes an isolated case (for example, a psychopath demanding a parachute to escape or a ransom for a nonpolitical cause) and what constitutes a true terrorist action are just as real as those involved in determining what constitutes a terrorist act in general.

We have chosen here to compare three different sources of statistics on aircraft hijackings [Table 18]. These are from Captain Claude Bergeron, the IFP (Institut français de polémologie), and the FAA (Federal Aviation Administration). Variations are great-est between source 1 and sources 2 and 3, doubtless because Bergeron draws heavily on secondary sources that the FAA most probably does not use. Bergeron's statistics include possible hijacking attempts, threats to take over aircraft, and sabotage attempts and threats. The three sources thus cannot be compared in full. However, if we compare 1970–1985 (where data are available from both sources), the totals are remarkably similar for the last two sources (IFP, 567; FAA, 587).

Despite the differences among sources, the results are more or less comparable when we examine the 1970–1985 period in 5-year subdivisions [Table 19]. As can be seen from these values, the number of aircraft hijackings was at an all-time high between 1970

Table 18. Numbers of aircraft hijackings according to three sources.

			Source 3	
	Source 1	Source 2	World	USA
1968	37	36	–	22
1969	95	90	–	40
1970	115	91	83	27
1971	71	62	58	27
1972	116	71	62	31
1973	51	28	22	2
1974	39	24	26	7
1975	35	25	25	12
1976	48	18	18	4
1977	48	32	32	6
1978	44	31	31	13
1979	53	27	27	13
1980	64	41	41	22
1981	72	32	32	8
1982	55	17	32	10
1983	50	30	34	19
1984	43	25	28	7
1985	65	13	36	6
1986	25	5	–	–
1987	–	4	–	–
1988	–	7	–	–
Total	1 126	709	587	276

Source 1: Bergeron (1989).

Source 2: IFP (1988). The IFP compares three main sources: statistics produced by the FAA (Federal Aviation Administration, Office of Civil Aviation Security), statistics provided by Michel Clérel, head of the emergency medical department at Paris airport, and statistics from the German Cockpit Association in Frankfurt. Except for the years 1982 and 1985, IFP statistics seem fairly consistent with those of the FAA (the differences would appear to stem from the fact that domestic flights are not dealt with in the same manner by the various sources).

Source 3: Federal Aviation Administration, Office of Civil Aviation Security, US Department of Transport, Washington, DC, USA.

Table 19. Numbers of aircraft hijackings per 5-year period according to three sources.

	Source 1	Source 2	Source 3
1970–74	392 (40.5)[a]	276 (48.7)	251 (42.8)
1975–79	228 (23.5)	133 (23.4)	133 (22.7)
1980–84	284 (29.3)	145 (25.6)	167 (28.4)
1985	65 (6.7)	13 (2.3)	36 (6.1)

Sources: 1 – Bergeron (1989); 2 – IFP (1988); 3 – US Federal Aviation Administration.
[a] Values in parentheses are percentages for period 1970–1985.

and 1974; it then stabilized to some extent for 1975–1979 and 1980–1984. There are no real differences between these last two periods. It is very probable that the 1985–1989 period will show a substantial decline in the number of hijackings, as the downward trend since 1975 has been attributable to increased security measures in airports since 1973.

The values reveal something entirely different, however, when it comes to comparing the number of deaths resulting from hijackings, especially those attributable to explosions en route [Table 20]. These values might tempt one to conclude that the 1970–1974 period was the worst, as the average number of deaths in relation to hijackings was 1.72, as compared to 1.31 and 0.79 for the 1975–1979 and 1980–1984 periods. However, we know that the 1985–1989 period will reverse this trend, because, despite the downward trend in the number of hijackings, the number of deaths for this period rose. Although we do not have all the statistics from 1985 to 1989, in addition to the Air India and Egyptair flights mentioned for 1985, we know the tragic outcome of Pan Am flight 103 (270 dead, 189 of whom were US citizens) in December 1988, and of UTA 772 from Ndjamena to Paris, which exploded above the Ténéré desert in Niger (171 dead). These values could increase the ratio of number of deaths per hijacking to about 25, which, in relation to the frequency of terrorist actions, would be hitherto unequalled.

There is thus a highly ironic element in all this. Security measures have clearly contributed greatly to limiting the choice of

Table 20. Number of deaths in relation to frequency of hijackings.

	No. of incidents	No. of deaths	Deaths per incident
1970	91	84	0.92
1971	62	25	0.40
1972	71	114	1.61
1973	28	92	3.29
1974	24	161	6.71
Subtotal	**276**	**476**	**1.72**
1975	25	1	0.04
1976	18	168	9.33
1977	32	0	–
1978	31	5	0.16
1979	27	0	–
Subtotal	**133**	**174**	**1.31**
1980	41	0	–
1981	32	2	0.06
1982	17	1	0.06
1983	30	112	3.73
1984	25	0	–
Subtotal	**145**	**115**	**0.79**
1985	13	390[a]	30.00

Source: IFP (1988).

[a] Includes Air India flight (Montreal–London), 23 June 1985, 329 dead) and Egyptair flight (Athens–Cairo, 23 November 1985, 60 dead).

easy targets for terrorist organizations, which are increasingly less interested in destroying symbolic targets such as buildings and property and more determined to revenge themselves indiscriminately on innocent people such as aircraft passengers. However, attacks using plastic explosive may well have been planned 10 years ago, with several more years required before the explosive could be obtained, and more time still needed to plan how it would be used, as major airports become increasingly secure.[1] This phe-

[1] One could always reply that this statement can be refuted by what happened to Pan Am flight 103, which originated in Frankfurt and London. It is just as probable that fear of failure forced certain organizations to rely on different methods in many other cases.

Table 21. Ratio of deaths caused by aircraft explosions to total number of deaths caused by terrorist attacks.

	Total number of deaths attributable to –		Aircraft as percentage of terrorism
	Terrorism	Aircraft bombings	
1970–74	795	476	59.9
1975–79	2 132	174	8.2
1980–84	1 917	115	6.0
1985–88	2 720	660	24.3
1985–89[a]	3 400	841	24.7

Sources: Table 16 (terrorism) and Table 20 (aircraft bombings).

[a] The 1985–1989 value was estimated on the basis of the simple arimetic mean for 1985, 1986, 1987, and 1988. The last incident taken into account was, therefore, the UTA flight, which claimed 171 victims (19 September 1989).

nomenon would explain the fresh outbreak of aircraft bombings that is taking place more than 10 years after the first security measures were implemented in airports.

Until recently, we could congratulate ourselves on the gradual decline in the number of deaths caused by aircraft explosions, which, for some time, had accounted for an extremely small portion of the total number of victims of terrorism. The episodes that took place from 1985 to 1989, however, obviously force us to reconsider the situation. Aircraft hijackings played a major role in the terrorist strategies of the 1970–1974 period [Table 21]. Data from 1975 to 1985 confirm the effectiveness of security measures in airports,[2] while figures for 1985–1989 reveal a significant renewal in "indiscriminate victimization," attributable largely to an increase in sophisticated technical methods at the disposal of terrorist organizations.

One last statistic: although more lethal, aircraft hijackings are accounting for an increasingly smaller percentage of all terrorist

[2] Like Bergeron (1989: 922), we feel that these security measures have been much more effective at limiting the number of hijackings than antiterrorist-force operations. Significant results are also expected from the convention recently signed in Montreal (March 1991) by 40 countries, including Iraq and Czechoslovakia, on methods to "mark" various chemical products making up plastic explosives. This convention is called "Convention on the Marking of Plastic Explosives for the Purpose of Detection" (see *Washington Post* of 2 March 1991).

attempts [Table 18]. The values for 1970–1974, 1975–1979, 1980–1984, and 1985–1988 are: 11.2%, 4.2%, 4.3% and 0.9% (in accordance with IFP figures, 29 incidents were used for the 1985–1988 period).

Terrorist attacks in Canada and the cost of security measures

Canada has not been spared violence. Judy M. Torrance (1986: 41) states that there were:

> *Twenty-two Orange-Green riots in Toronto between 1867 and 1892 ... 300 violent strikes between 1900 and 1974 ... several hundred cases of Doukhobor violence ... 170-odd events attributed to the FLQ [Front de Libération du Québec] ... and 246 acts of collective violence in Ontario and Quebec between 1963 and 1973....*

According to figures from the Department of the Solicitor General published in the report by the Honourable William M. Kelly (1989), about 300 terrorist incidents occurred in Canada between 1960 and 1989. In a report from the Department of National Defence, Anthony Kellett (1988: 94)[3] lists about 400 incidents, 48 of which were attributable to international terrorism, for the 1960–1985 period alone. These high numbers stem from the fact that all acts of violence in Canada fall under the Criminal Code, making it difficult to distinguish between violence per se and political terrorism.

The various works and publications all agree that domestic terrorism is on the decline, which automatically increases the relative importance of international terrorism in Canada, as this was relatively stable during the period under consideration. Figures from the Kelly and Kellett reports clearly emphasize this. The Kellett report shows that, between 1965 and 1969, the ratio of domestic

[3] Anthony Kellett is now seconded to the Office of the Solicitor General, where he has taken over the duties of Chief of Research at the National Security Coordination Centre.

to international terrorism was 11.5:1. By and large, the two reports show that domestic violence is on the wane, with the exception of the 1980–1984 period, which seems to have been characterized by a new wave of terrorist activity. If we rely on the Kelly report alone, however, it is obvious that the most recent period under consideration (1985–1989) is characterized by a balance between domestic and international terrorism.[4] In other words, it is external events that are making Canada increasingly vulnerable to acts of political violence. When presenting statistics on international terrorism,[5] we now distinguish foreign from domestic incidents. Of the 51 cases of international terrorism identified by the Department of the Solicitor General for the 1968–1989 period, 35 occurred in Canada and 16 took place abroad. Almost half of these incidents were the result of action by immigrant groups,[6] the best known being the anti-Castro movements in the 1960s, and, more recently, extremist Armenian and Sikh movements.

Most terrorist attacks in Canada are bombings — 63% according to Kelly (1989: 40) or over 50% according to Kellett (1988: appendix C-3) — with the main targets being the diplomatic community (50%), the business world (10%), and the government (10%) (Kellett 1988: appendix C-3; Kelly 1989: 41). We do not have any chronological data on the number of victims claimed by international terrorism on Canadian soil; however, according to

4 This characteristic is even more pronounced if we rely solely on the Kelly report. However, it does not seem to correspond greatly to the situation in European countries. In France, for example, for the 1981–1986 period, 3 524 attacks by explosive (3 328 of which were made by extremist movements) were related to domestic terrorism, as compared with 84 for international terrorism. These figures were supplied by the Minister of the Interior in response to a question by Michel Hannoun (see *Journal Officiel. questions écrites* for Monday 26 October 1987 (pp. 5 963–5 964)).

5 International terrorism is defined as being motivated by "issues or grievances springing from past or current actions or situations in another country and whose ultimate focus is ... that other country's people and government" (Kelly 1989: 9). In this category, domestic incidents are distinguished from international incidents. For example, a Canadian journalist or citizen kidnapped abroad would fall into the latter category.

6 Responsible for 47% of the incidents; nationalists or autonomists were responsible for 18% (Kelly, 1989: 42). Kellett's figures are somewhat different: he claims that 73% of terrorist acts for the period between 1968 and 1987 were due to immigrant movements within Canada. We should also mention that only 46 incidents are included here as being true terrorist attacks, as opposed to the 51 identified in the Kelly report (see Kellett 1988: appendix C-1).

Table 22. Number of terrorist incidents in Canada between 1965 and 1985

	Domestic terrorism		International terrorism	
	Kelly (1989)	Kellett (1988)	Kelly (1989)	Kellett (1988)
1965–69	103	138	>7[a]	12
1970–74	60	95	15	9
1975–79	18	22	2	11
1980–84	31	39	14	12
1985–89	13	NA	13	NA
Total	225	294	51	44

[a] Kelly (1989) supplies figures on international terrorism for 1968 and 1969 only.
NA = not available.

international expert Edward F. Mickolus (quoted in Kellett 1988: 106), there were 23 victims of terrorism in Canada between 1968 and 1977, putting this country 14th in the world. It is likely that Canada has since dropped somewhat on this scale of violence, given the more dramatic increase in terrorism in other countries.

However, there is one major exception to this trend: the explosion of the Air India flight on 23 June 1985 that killed 329 people, 279 of whom were Canadian. This incident alone probably multiplied by a very large factor the average number of deaths due to terrorist incidents in Canada during the 1980s — Kellett (1988: appendices A and B) identifies only 31 deaths as being indisputably the result of terrorist attacks during the 1968–1987 period. Kelly, in his report, insists quite rightly on the dangers of the resurgence of international terrorism in Canada, and also on those of "narco-terrorism," which have not yet made their presence felt to a significant degree in this country (Kelly 1989: 7).

The costs of terrorism for the West are enormous. In addition to the fact that European countries have been deprived of major sums of hard currency because of a drop in the usual number of tourists — for 1985 alone, the US State Department estimated that losses due to the drop in tourist revenues in Europe amounted

to $1 billion (quoted in Kellett 1988: 14) — one must consider improvements in international cooperation in the antiterrorist struggle, the cost of international conferences on these important issues,[7] the compensation that some countries pay to victims of terrorism, or the damage to public property,[8] not to mention the phenomenal increase in the cost of reinforcing security measures at borders, on railways, and in airports and foreign embassies. All these factors make it almost impossible to arrive at total cost on an international, or even national, scale.

According to Anthony Kellett (1988: 151):

> *It was estimated that the first year (1986–87) of the new counter-terrorist programme cost $48.8 million, excluding about $7 million spent on the CSIS [Canadian Security Intelligence Service] counter-terrorism programme ... and the RCMP [Royal Canadian Mounted Police] budget was increased in 1987–88 to allow it to hire 500 new people to replace personnel diverted to the fight against terrorism.*

According to the figures at our disposal, reinforced security measures at international and secondary airports designed to monitor the perimeter and access to security areas could represent annual investments of about $70 million over a period of 9 years, or $630 million between 1988 and 1996. This figure does not include expected capital expenditures of $25 million per year for the same period. At the very least, airport security will require $100 million per year.

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7 For Europe, these are, in particular, the Club of Bern (which includes Switzerland and the countries of the European Economic Community (EEC), except Ireland and Greece since 1971); TREVI (which was established in 1976 and includes the EEC countries and Morocco) (TREVI is the Terrorisme, Radicalisme et Violence International police network); and the Club of Five or Club of Vienna, whose meetings on terrorism and the means to combat it have taken place regularly since 1979 at two levels (ministers and senior civil servants). Obviously, to these forms of cooperation we may add that taking place at the level of judicial inquiry — in particular, as part of Interpol.

8 Between 1969 and 1987, the United Kingdom apparently paid over $140 million in compensation for deaths and injuries, and $800 million for property damage caused by Irish Republican Army (IRA) terrorists (quoted in Kellett (1988)). In France, section 9 of the *Act of 9 September 1988* on the battle against terrorism and attacks against the security of the state provides, by means of an indemnity fund, for full compensation for bodily harm resulting from terrorist acts. France budgeted 210 million francs for the fund for 1987, 25 million of which have apparently already been paid out. For attacks occurring before 1 January 1985, a credit of 40 million francs was allocated to the Department of the Interior. (This information was obtained during a visit by the author to the Department of the Interior in Paris in January 1989.)

This sum is considerable when compared with what it cost Canada to participate in about 15 UN peace-keeping operations from 1949 to 1980, about $166 million (Sigler 1989A: 27). Furthermore, since 1988, Canada has been part of several observer missions — in Iran–Iraq and Afghanistan–Pakistan in 1988 and Namibia and Central America in 1989 — in addition to its usual roles in the Middle East and Cyprus. The costs of this cooperation in peace missions will probably amount to $25 million, half of which is probably recoverable from the UN. These figures are obviously misleading, as they do not include training costs for the peace-keeping contingents; these costs are, of course, absorbed by the general budget of the Department of National Defence. However, even general figures provide a good indication of the scale of costs represented by the antiterrorist struggle. In other words, there has been a gradual shift of the East–West threat toward forms of conflict that, until now, have received very little attention from decision makers. It is also conceivable that terrorist incidents will increase in countries with very strict forms of state control, such as the former USSR, without western countries necessarily suffering any repercussions.

Chapter 9
Conclusion

Lenin died for the second time on 7 February 1990, the day that the plenary session of the Central Committee of the Communist Party of the Soviet Union (CPSU) decided that the Party's "leading role" in government should be abolished. The former USSR is now suffering from an advanced form of "constitutional cannibalism" while, within the empire, an unbelievable process of nationalism has come to the fore.

It is no longer certain whether yesterday's victorious powers are now friends or merely accomplices in a huge industrial reorganization that could jeopardize the accomplishments of long North–South discussions. Whatever the case, both sides are cooperating out of a fear of generalized instability that could extend from the former USSR to other regions of the world. At the same time, there is a threat on the horizon of a return to Muslim fundamentalism: pressures are being felt increasingly strongly in the Soviet Muslim republics, in Kashmir, and in the Arab world, including Algeria and Morocco. The Front Islamique du Salut (Islamic Salvation Front: whose slogan is: "The West is degenerate. No East, No West, Islam is the best") seems to be gaining ground, in Algeria especially.

The word "democracy" does not exist in Islamic dictionaries, the Koran, the Sunna, or the sharia. Democracy was invented by the people, or rather by philosophers of the people, as a means of defence against the abuses of kings who held their power by divine right. Islam, which is both a religion and a sacred, civil community, has not been able to offer a valid alternative to the

problems faced by the West. However, it is true that, with the Peace of Westfalia in 1648, the West secularized its politics, and lay thinking has perhaps imposed solutions that too often ignore concerns about mankind and its environment. At this point, it is possible to believe that the religious factor, which has caused antagonism, will eventually be again included among other aspects of contemporary political life, and this without the need for countries to resort to war to solve their differences. In this sense, the Gulf War might have signified for the Middle East what the Thirty Years War did for Europe.

Nonetheless, at the dawn of what may be a new intellectual renaissance, it is still true that current debates are characterized by many questions concerning values and the ultimate place of mankind in the universe. What conclusions about security can we legitimately draw from this study?

Generally speaking, even if East–West relations experienced some highs and lows in the throes of the Cold War, they were still gradually moving toward a reasonably stable balance. Political cooperation became progressively more important than the need to stabilize a military situation that, throughout the years, grew more and more untenable. We are not here going to restart the debate between those who believe that this situation was the result of the West having won the Cold War, and those who hold the contrary view, that the great political metamorphosis was due to changes in attitudes, particularly of the Soviet political leaders, that led to the disappearance of ideological differences between the two blocs and, consequently, promoted political cooperation.

It will be enough to present some strong points, all dealing with the links between policy and security. The East–West war will never again be a rational means of extending national foreign policy. It will prove too costly, there will be no winner, and scientific studies indicate that the very survival of the planet may eventually be at risk.

During the same period, western nations also realized that it was necessary to move from distrust to a situation of relative stability through arms-control negotiations and the strengthening of international confidence. This process led to an increase in

institutional seminars on arms control that created their own security needs and functions. This slow transformation also allowed the countries to follow more closely the "peace by right" model, here taken in the sense of a more extensive regulation of arms control through institutional negotiations, as opposed to the old "peace by might" model.

However, the political situation after the fall of the Berlin Wall has evolved so rapidly that arms-control negotiations are dragging on, because they are still a factor in the progress of the large-scale political negotiations on the future of European security. This last point shows clearly that political will from now on will take precedence over former debates of a technical military nature, thus opening the path to a new era in the history of East–West relations.

In spite of the technical military opposition between East and West, western countries are far from ruined by this costly enterprise. Statistics indicate that western military spending has played a large role in the economic growth of western countries. The statistics from eastern countries are too unreliable to provide such clear conclusions. There are those who believe that the West has ruined the East in a costly arms race: this may be true but it is not the only valid explanation. The failure of the Soviet economy can also be explained by a political regime that never allowed a market economy to be established, and also, possibly, by an apparent moving together of the formerly separate civil and military sectors of its economy. Whatever the reason, all authors admit that the money spent on arms could have been put to more productive ends, in the East as well as in the West.

It is too early to know if East–West relations will follow the model of peace through "transsystemic objectives," the return to cooperation between northern industrial democracies being the outstanding sign of the changes that have occurred in recent years in Europe. Undoubtedly, environmental issues, the links between financial, technical, and economic assistance, and the liberalization of governments, as well as issues regarding the rights of the individual, will occupy a prominent place on the agenda of East–West relations.

The North–South axis appears much less promising. The nations of the South spend almost as much on military affairs as the North, in relation to their GNPs. The growth curve of their military spending during recent years has also been more rapid than the curve for economic growth. In addition, the Middle East continues to be one of the most prominent global hot spots, at least if one considers the most frequently quoted reports of military spending in relation to GNP. This region also receives the most significant arms transfers in the world.

The application of western arms-control models to this region faces many difficulties:

- Most of the countries still prefer the "peace by might" model;
- The political situation is becoming graver in Israel and it is deteriorating in the occupied territories;
- The Arab states are experiencing new rivalries, particularly between Syria and Iraq;
- The ever-present dispute over leadership of the Arab world continues; and
- The development of Islamic fundamentalism is rapidly progressing, from the shores of the CIS Muslim republics to the furthermost borders of North African countries.

If there is one essential lesson that the countries of the South must learn from East–West opposition, it is the futility of relying solely on military spending to change an adversarial political situation into a partnership or dependent cooperation. All indications point to the urgency of moving from the "peace by might" to the "peace by right" model, in which military rivalry would be progressively regulated through arms control and measures for strengthening the confidence between nations. In the same manner, the major powers must reopen the peace dialogue in the different regions, as was done in the case of Cambodia; they must restrict the sale of military equipment to these countries,[1] although the West

[1] In this regard, it may be necessary to reopen and expand the CATT (Conventional Arms Transfer Talks) negotiations of the 1970s. so that China can be included.

has a growing surplus, work jointly for the nonproliferation of nuclear weapons and missile technology[2] and, above all, ensure the economic development of poor countries on the condition that they accept even a rudimentary liberalization of their political customs.

The increase in regional conflicts and continued poverty in the Third World constitute the worst-case scenario in the southern hemisphere. We are leaving aside here the question of which international structure (bipolarity, multipolarity, or polycentrism) is the most stable, or perhaps the least unstable — all empirical works in this field are contradictory, including the recent works by Brecher et al. (1988); and see also the studies by James (1989) and by Brecher and Wilkenfeld (1989). One thing is certain: no currently predictable scenarios predict that the world will be more stable than before, or that it will be better tomorrow than it was yesterday. It may be that the entire system, at least as far as East–West relations are concerned, will now be less dangerous than before, but it is practically impossible to draw any such conclusions about conflicts in the South. Certain regional problems, such as the insoluble Palestinian crisis, the growth of Muslim fundamentalism, and the revival of several socioethnic conflicts, are all likely to encourage the spread of terrorism throughout the world. Most of the time, terrorism is the result of "desperate causes," and unless the economies

[2] According to CIA director William Webster, about 15 countries will be involved in producing their own ballistic missiles by the year 2000. Countries that probably have had nuclear capabilities since the 1970s are no doubt India and Israel; those said to be on the "nuclear threshold" are doubtless Pakistan and South Africa, since the 1980s; Argentina, Brazil, and North Korea will have to be added in the 1990s. Furthermore, most of these countries, and several others, are engaged in producing or purchasing ballistic missiles with a range over 300 km and probably capable of delivering a 500-kg load. India has developed the SLV-3, the first stage of which was used to develop the AGNI medium-range missile (range: 2 500 km), the latter having passed its first trials in 1989. Pakistan is perfecting the Shadoz (range: 300 km); Argentina, the Condor II (known in Egypt as the Badr-2000, range: over 1 000 km); Brazil, the SS-300 and the Sondra IV (range: 1 000 km); the People's Republic of China, the CSS-2 (range: 2 500 km), which has been purchased by Saudi Arabia; while Syria has the Soviet Scud and SS-21. Libya apparently has purchased the Oteiba missile from Brazil (range: 370 km), and Iraq, doubtless with the help of Egyptian engineers, has developed an offshoot of the Scud, the Al Hussein (range: 600 km), which it used in the war against Iran. Israel, for its part, has developed the Jericho 1 and 2 (the latter having a range of 1 500 km), with the Jericho 3 apparently being under study. Furthermore, there are certain rumours that India and Israel are already involved in the manufacture of thermonuclear warheads, which would once again raise the stakes in the arms race among Third World countries.

of Third World countries improve enormously and those same countries see improved terms of exchange, such causes may become more common.

With anti-Armenian pogroms in Azerbaijan and Tadzhikistan, anti-Turkish pogroms in Bulgaria, the persecution of Jews in the former USSR, and all the regional conflicts brewing throughout the world, there is no doubt that the resurgence of nationalism and ethnic conflicts, coupled with economic stagnation, remain the two evils on which, in the future, it will be easy to capitalize to increase frustrations and thus add fuel to the conflicts.

As shown in this study, terrorism is indisputably on the rise, at least as regards the number of dead and injured for the 1985–1989 period. Measures to reinforce security at airports have certainly been considerable, but it would be naive to contend that airports are the only targets. In the fight against terrorism and drugs,[3] the western powers are, quite rightly, attempting to isolate themselves as much as possible, and to contain the worst damage these phenomena can inflict. However, only the eradication of social injustice, and a corresponding improvement in the distribution of wealth throughout the world, may be capable of stamping out these two plagues at the source. Peasant farmers in the South who grow coca or opium poppies would probably be more than happy to grow something else, if they could make a decent living doing so — in several Latin American countries where the average salary is $1 700 per year, 0.1 ha of opium poppy can generate up to $5 000 profit (Dziedzic 1989: 535). This major socioeconomic problem can only be solved in the context of a more general policy aimed at eradicating cultivation of the crops in question.

All is not black, however. Our study shows that there is no direct relationship between the assistance given and the military spending of the countries. This only confirms the parallel existence

[3] We do not have any figures on the cost of the war against drugs; however, we do know that drug traffic generates an estimated $500 billion per year (the demand in the USA represents $100 billion alone) (see Dziedzic 1989). Estimates of the amount of money laundered through the banking system vary around $120 billion per year.

of our first two analytical models. Here, military spending is based on geopolitical considerations in accordance with the "peace by might" model, while economic assistance follows "peace by right" criteria or, if you will, humanitarian considerations linked to social justice or national economic development. Certain efforts on the part of industrialized countries are also worth noting. In practical terms, Switzerland spends almost as much on assistance to developing countries as it does on its own security, the ratio of its assistance to its own military spending being very high. Between 1965 and 1988, this percentage was 82 for Switzerland, 78 for Japan, 43 for Belgium, and 38 for Canada, while the average assistance to military spending ratio for all OECD donor countries was 17.8%. All countries may consider such a policy satisfactory but it must also be understood, as we have already mentioned, that this ratio dropped to 8.2% in 1985–1988. Japan has recently emerged as the second most important OECD donor country and we would wish that other countries be inspired by this example in the future.

However, pressing environmental issues and the priority given to the fight against terrorism and drugs mark a certain change in the perception of threats. Terrorism and the proliferation of nuclear arms seem to guide countries of the northern hemisphere toward a new solidarity to counteract the growing threat from the South. This solidarity is evident at international conferences on the protection of the environment and, equally, in the excellent cooperation between the different criminal police forces and intelligence agencies. In the same way, the countries of the North seem to have rediscovered the virtues of the UN in solving regional conflicts: for example, its role in negotiating a cease-fire between Iran and Iraq, in supervising free elections in Namibia, and in developing a national unity government in Cambodia. This may herald a greater role for regional organizations in solving future conflicts, provided the nations of the South are willing to shoulder their own responsibilities.

In the case of the Gulf War, the same can be said of the increased role of international organizations, whatever our judgment on the validity of military sanctions. The Gulf War is

probably a special case that will not be repeated elsewhere but it can also be seen to mark the beginning of a new dialogue between the major players in the international system. The admission of Japan and Germany as permanent members of the Security Council would be enough to add new credibility to the international organization. This would also apply to Brazil, India, and Mexico to strengthen representation from the South.

Canada has no difficulty knowing where it stands. Our study of parliamentary and media debates indicates clearly Canada's position. It played a primary role in the creation of the UN and NATO; it faithfully, although somewhat modestly, participated in NATO; it always believed that, outside these alliances, it could not increase safety or even make its influence felt. At the same time, it detested "The Bomb" and nuclear arms, defended the cause of the UN and disarmament, insisted on assistance to Third World countries, and was at the forefront of environmental thinking, now almost unanimously accepted throughout the world.

All this, however, is a matter of speeches and words. When it comes to deeds, Canada has often been less effective than it appears. More often than not, it has had to side with its southern neighbour on issues of peace and international security and it has often found itself behind many other countries when it comes to official assistance to Third World countries. It has, however, shown its worth in peace-keeping operations, for which it received the Nobel Peace Prize. These operations have not been very costly, amounting to about $250 million from 1945 to 1990. When these costs are compared to the costs for improved airport security or expenses incurred by the Gulf War, one can see that the vulnerability of northern countries to the threats from their southern counterparts is becoming increasingly real and immediate, while the East–West threat is becoming more hypothetical and remote. This is particularly true with regard to war between nations, although it does not exclude ethnic and social conflicts which may, at any time, reopen the question of the state and its functioning. This is why we have used the title "The End of a Military Century?" which at least refers to the classic opposition in East–West international relations.

One of the objectives of this study was to demonstrate that security is based more on the needs of a just, equitable society than on the opposition between reasons of state that are, too often, looking to the past. The nature of the East–West threat has changed so much that we might well ask if it still exists. There are, however, other dangers on the horizon, such as pollution and environmental degradation due to the excesses of industrialization, the terrorist threat, and the threat posed by drugs. All these examples show that the problems involved in the survival of our planet must henceforth be examined from a North–South perspective and that it is vital to implement a process from which the global dimension will never be omitted, and always remain a priority.

Appendix
Military Spending

Appendix. Africa — military spending (millions, 1978 constant US dollars).

Year	Benin	Burkina Faso	Burundi	Cameroon	Central African Republic	Chad	Congo	Côte d'Ivoire
1965	10.80	7.10	5.20	40.30	4.20	15.20	11.70	57.40
1966	9.00	8.90	5.20	42.40	5.70	22.80	16.80	57.40
1967	10.80	8.90	5.20	44.40	7.10	22.80	18.40	60.20
1968	10.80	8.90	7.00	48.40	8.50	24.30	15.10	66.00
1969	10.80	8.90	7.00	48.40	9.90	22.80	23.50	63.10
1970	10.00	10.00	6.00	46.00	11.00	28.00	32.00	53.00
1971	10.00	10.00	6.00	47.00	12.00	28.00	32.00	74.00
1972	9.00	10.00	9.00	46.00	10.00	27.00	33.00	89.00
1973	10.00	10.00	10.00	45.00	12.00	27.00	37.00	64.00
1974	9.00	10.00	11.00	47.00	10.00	31.00	39.00	75.00
1975	9.00	20.00	11.00	51.00	9.00	34.00	40.00	83.00
1976	9.00	25.00	11.00	56.00	10.00	32.00	41.00	103.00
1977	10.00	21.00	15.00	51.00	11.00	26.00	41.00	90.00
1978	15.00	30.00	16.00	61.00	11.00	23.00	44.00	158.00
1979	15.00	29.00	20.00	59.00	9.00	22.10	35.00	214.00
1980	17.10	24.80	23.40	74.90	9.70	21.20	39.30	151.30
1981	28.80	26.90	27.00	62.80	10.60	17.60	43.90	146.20
1982	—	29.00	23.40	67.80	10.60	—	59.30	147.50
1983	27.70	27.90	25.50	136.70	8.90	6.00	53.90	97.90
1984	25.60	27.90	22.70	136.70	—	9.00	37.70	96.60
1985	—	—	22.70	153.90	—	12.00	51.60	—
1986	22.00	—	24.00	180.00	—	21.00	84.00	117.00
1987	—	35.00	23.00	166.00	—	23.00	70.00	158.00
1988	22.20	36.00	NA	NA	NA	4.20	NA	183.90
1965–69	62.30	52.70	35.60	269.90	46.30	135.90	117.50	357.00
1970–74	57.00	70.00	53.00	282.00	64.00	175.00	213.00	438.00
1975–79	75.10	149.80	96.40	352.90	59.70	158.40	240.30	799.30
1980–84	99.10	136.50	144.70	632.70	39.80	65.70	285.70	639.70
1985–88	44.20	71.00	69.70	499.90	NA	60.20	205.60	458.90
1965–88	337.80	480.00	399.40	2 037.40	209.90	595.20	1 062.10	2 692.90

Source: Data adapted from ACDA (1990).

Appendix. Africa — Military spending (millions, 1978 constant US dollars) (continued).

Year	Ethiopia	Gabon	Ghana	Guinea	Kenya	Liberia	Libya
1965	56.60	11.70	169.10	32.60	18.30	4.90	115.00
1966	60.90	11.70	206.20	40.80	24.90	4.90	134.60
1967	59.50	11.70	284.50	42.80	16.60	6.50	140.20
1968	69.60	11.70	284.50	42.80	36.50	6.50	168.30
1969	71.10	17.60	263.90	42.80	31.50	6.50	235.60
1970	66.00	21.00	208.00	30.00	32.00	8.00	443.00
1971	71.00	24.00	195.00	29.00	34.00	7.00	440.00
1972	80.00	26.00	169.00	26.00	46.00	6.00	335.00
1973	62.00	28.00	125.00	25.00	55.00	5.00	390.00
1974	62.00	20.00	156.00	24.00	56.00	5.00	361.00
1975	126.00	24.00	185.00	23.00	68.00	4.00	262.00
1976	166.00	20.00	205.00	22.00	64.00	5.00	373.00
1977	199.00	21.00	95.00	22.00	113.00	6.00	451.00
1978	103.00	9.00	70.00	—	205.00	9.00	729.00
1979	322.00	—	64.00	3.00	255.00	8.00	394.00
1980	373.30	82.70	46.50	23.60	246.60	10.80	2 065.30
1981	354.80	65.30	74.70	70.10	182.80	24.70	—
1982	356.60	67.90	69.10	—	233.60	32.30	2 131.30
1983	355.70	59.20	35.20	—	228.20	17.70	2 665.70
1984	368.90	58.30	63.40	47.30	209.80	14.60	3 048.40
1985	349.60	—	102.90	—	233.60	17.10	—
1986	337.00	124.00	106.00	—	160.00	22.00	—
1987	366.00	—	111.00	—	171.00	24.00	1 467.00
1988	NA	111.50	58.80	22.40	277.10	NA	NA
1965–69	383.70	85.60	1416.10	231.90	159.80	37.30	1 236.70
1970–74	467.00	143.00	1038.00	157.00	291.00	35.00	
2 231.00							
1975–79	1 289.30	156.70	665.50	93.60	951.60	42.80	4 274.30
1980–84	2 158.90	333.50	391.80	141.00	1 334.60	117.10	9 910.70
1985–88	1 052.60	235.50	378.60	22.40	841.70	63.10	1 467.00
1965–88	5 351.40	954.20	3890.00	645.90	3 578.70	232.10	17 652.70

Source: Data adapted from ACDA (1990).

Appendix. Africa — Military spending (millions, 1978 constant US dollars) (continued).

Year	Malawi	Mali	Morocco	Mauritania	Niger	Nigeria	Rwanda
1965	0.50	13.90	161.20	5.10	14.70	325.60	7.40
1966	0.90	13.90	173.80	5.10	7.40	260.40	12.30
1967	0.90	15.60	188.10	5.10	7.40	678.20	7.40
1968	0.90	12.20	218.60	5.10	9.20	1 039.10	9.80
1969	0.90	13.90	224.00	5.10	9.20	1 994.00	9.80
1970	2.00	15.00	203.00	5.00	8.00	1 880.00	12.00
1971	3.00	13.00	219.00	5.00	7.00	1 527.00	13.00
1972	3.00	16.00	246.00	8.00	8.00	1 905.00	11.00
1973	5.00	18.00	275.00	9.00	6.00	1 491.00	16.00
1974	6.00	19.00	290.00	10.00	6.00	1 244.00	12.00
1975	6.00	23.00	467.00	10.00	9.00	1 601.00	10.00
1976	11.00	25.00	712.00	30.00	9.00	2 033.00	10.00
1977	18.00	30.00	838.00	30.00	9.00	2 179.00	10.00
1978	22.00	28.00	772.00	29.00	9.00	2 054.00	13.00
1979	18.00	30.00	762.00	—	10.00	1 531.00	14.00
1980	49.70	23.60	906.60	52.70	9.80	1 575.70	20.70
1981	31.20	22.60	940.20	41.10	9.80	1 472.50	20.00
1982	23.40	24.50	985.80	38.00	9.00	1 169.50	23.70
1983	19.50	24.50	771.20	27.90	9.00	1 045.00	27.40
1984	18.50	21.70	755.10	—	8.10	737.80	—
1985	—	24.50	1013.90	34.90	9.00	640.60	22.20
1986	27.00	—	1 163.00	29.00	9.00	525.00	—
1987	20.00	30.00	1 196.00	22.00	—	384.00	26.00
1988	31.20	29.80	1 122.30	NA	11.90	462.90	17.70
1965–69	6.20	84.40	1 168.70	30.30	55.80	6 177.30	58.60
1970–74	25.00	104.00	1 700.00	47.00	44.00	9 648.00	74.00
1975–79	124.70	159.60	4 457.60	151.70	55.80	10 973.70	77.70
1980–84	142.20	141.30	5 372.80	194.40	54.50	6 641.00	113.90
1985–88	78.20	84.30	4 495.20	85.90	29.80	2 012.50	65.90
1965–88	376.20	573.70	17 194.40	509.30	240.00	35 452.60	390.00

Source: Data adapted from ACDA (1990).

Appendix. Africa — Military spending (millions, 1978 constant US dollars) (continued).

Year	Sénégal	Sierra Leone	Somalia	South Africa	Sudan	Tanzania	Togo
1965	35.10	4.80	27.90	578.00	109.30	15.20	7.10
1966	31.90	4.80	35.90	659.20	107.40	20.90	5.30
1967	35.10	3.20	35.90	730.50	120.40	20.90	7.10
1968	35.10	3.20	39.90	748.70	133.30	30.40	7.10
1969	35.10	4.80	43.80	856.50	151.90	26.60	7.10
1970	35.00	5.00	30.00	762.00	128.00	40.00	7.00
1971	36.00	7.00	30.00	867.00	147.00	54.00	8.00
1972	35.00	5.00	30.00	848.00	140.00	76.00	10.00
1973	34.00	7.00	30.00	1 061.00	142.00	76.00	11.00
1974	33.00	6.00	35.00	1 305.00	155.00	109.00	13.00
1975	34.00	8.00	32.00	1 671.00	130.00	141.00	10.00
1976	38.00	7.00	32.00	2 043.00	125.00	131.00	14.00
1977	41.00	7.00	34.00	2 140.00	175.00	142.00	18.00
1978	49.00	10.00	67.00	1 800.00	231.00	175.00	20.00
1979	58.00	13.00	85.00	1 602.00	218.00	251.00	19.00
1980	85.00	8.70	49.00	544.00	178.30	113.60	13.10
1981	65.30	12.10	48.70	618.90	169.70	139.70	14.00
1982	66.30	10.40	49.40	605.40	223.60	170.50	13.10
1983	65.30	8.70	45.10	757.40	111.80	158.60	12.30
1984	62.20	6.90	32.10	931.60	111.20	141.30	13.10
1985	65.30	8.70	—	1 599.20	92.10	147.60	15.60
1986	70.00	5.00	32.00	2 007.00	82.00	—	29.00
1987	60.00	—	—	2 295.00	124.00	—	31.00
1988	58.30	5.80	NA	2 362.50	134.00	201.60	NA
1965–69	207.30	25.60	213.40	4 334.90	750.30	154.10	40.50
1970–74	207.00	38.00	187.00	6 514.00	842.00	496.00	59.00
1975–79	305.00	53.70	299.00	9 800.00	1 057.30	953.60	94.10
1980–84	409.40	55.40	224.20	3 457.30	886.70	871.20	81.30
1985–88	253.60	19.40	32.00	8 263.70	432.10	349.20	75.60
1965–88	1382.30	192.10	955.60	32 369.90	3 968.30	2 824.10	350.60

Source: Data adapted from ACDA (1990).

Appendix. Africa — Military spending (millions, 1978 constant US dollars) (continued).

Year	Tunisia	Uganda	Zaire	Zambia	Africa
1965	32.90	69.50	192.50	36.00	2 196.60
1966	34.50	109.30	263.30	32.00	2 430.20
1967	37.80	104.30	196.90	28.00	2 962.50
1968	41.10	144.10	161.50	37.00	3 485.00
1969	39.40	154.00	181.40	22.00	4 642.80
1970	49.00	152.00	323.00	43.00	4 703.00
1971	49.00	167.00	276.00	107.00	4 554.00
1972	55.00	438.00	260.00	127.00	5 142.00
1973	55.00	250.00	198.00	81.00	4 670.00
1974	62.00	256.00	348.00	84.00	4 909.00
1975	76.00	231.00	274.00	77.00	5 759.00
1976	74.00	221.00	189.00	80.00	6 926.00
1977	78.00	179.00	115.00	73.00	7 288.00
1978	88.00	154.00	50.00	76.00	7 130.00
1979	87.00	106.00	50.00	121.00	6 424.10
1980	262.90	58.50	94.50	364.20	7 621.10
1981	195.70	61.90	52.60	—	5 051.80
1982	289.60	55.20	105.30	196.40	7 287.10
1983	354.80	60.20	81.00	—	7 325.90
1984	259.00	88.60	71.50	164.80	7 590.40
1985	287.60	—	105.30	—	3 410.40
1986	286.00	—	196.00	—	5 657.00
1987	264.00	—	—	—	7 066.00
1988	236.60	134.50	57.50	NA	5 582.70
1965–69	234.60	733.20	1 318.60	198.00	20 420.10
1970–74	346.00	1 494.00	1 679.00	519.00	29 737.00
1975–79	665.90	949.50	772.50	791.20	41 148.20
1980–84	1649.70	324.30	510.20	725.30	38 286.70
1985–88	1074.20	134.50	358.70	NA	21 716.10
1965–88	3970.40	3 635.50	4 639.00	2233.50	151 308.10

Source: Data adapted from ACDA (1900).

Appendix. Central America — Military spending (millions, 1978 constant US dollars).

Year	Dominican Republic	El Salvador	Guate-mala	Haiti	Hon-duras	Jamaica	Mexico
1965	65.40	19.50	30.40	14.30	11.60	6.10	305.90
1966	63.90	19.50	32.20	13.00	13.30	5.20	363.70
1967	59.40	21.30	34.00	13.00	14.90	5.20	353.10
1968	56.50	33.70	14.30	14.30	13.30	6.10	386.60
1969	53.50	60.30	34.00	13.00	28.20	5.20	403.30
1970	54.00	21.00	58.00	14.00	12.00	5.00	413.00
1971	55.00	23.00	40.00	17.00	17.00	7.00	450.00
1972	53.00	28.00	46.00	17.00	21.00	7.00	504.00
1973	55.00	27.00	38.00	14.00	20.00	10.00	521.00
1974	64.00	31.00	41.00	12.00	18.00	9.00	541.00
1975	62.00	31.00	60.00	12.00	22.00	9.00	694.00
1976	70.00	32.00	65.00	11.00	26.00	16.00	627.00
1977	76.00	34.00	82.00	11.00	27.00	16.00	607.00
1978	86.00	44.00	59.00	13.00	31.00	20.00	444.00
1979	96.00	41.00	56.00	22.00	30.00	23.00	428.00
1980	68.90	74.80	90.70	18.70	42.70	11.00	447.60
1981	77.20	90.10	88.00	21.10	35.30	14.50	594.10
1982	72.00	98.30	120.50	19.30	40.70	19.10	568.30
1983	69.90	97.70	127.10	16.90	52.00	16.20	569.70
1984	60.10	148.50	119.10	17.50	80.00	9.90	733.10
1985	71.50	134.30	111.90	17.50	77.40	9.90	691.10
1986	72.00	—	—	—	78.00	—	685.00
1987	77.00	101.00	96.00	20.00	78.00	13.00	605.00
1988	60.60	86.70	110.30	16.30	61.80	11.90	668.00
1965–69	298.60	154.20	145.00	67.40	81.40	27.70	1 812.60
1970–74	281.00	130.00	223.00	74.00	88.00	38.00	2 429.00
1975–79	390.00	182.00	322.00	69.00	136.00	84.00	2 800.00
1980–84	348.00	509.40	545.40	93.30	250.80	70.80	2 912.70
1985–88	281.10	322.10	318.20	53.80	295.20	34.80	2 649.10
1965–88	1 598.70	1 297.60	1 553.60	357.50	851.40	255.30	12 603.40

Source: Data adapted from ACDA (1990).

Appendix. Central America — Military spending (millions, 1978 constant US dollars) (continued).

Year	Nicaragua	Panama	Trinidad and Tobago	Central America
1965	17.50	1.80	7.40	479.80
1966	19.10	1.80	7.40	539.00
1967	20.70	1.80	7.40	530.70
1968	19.10	1.80	7.40	552.90
1969	20.70	3.50	7.40	629.10
1970	23.00	13.00	13.00	626.00
1971	27.00	24.00	10.00	670.00
1972	26.00	15.00	11.00	728.00
1973	26.00	16.00	7.00	734.00
1974	29.00	15.00	6.00	766.00
1975	39.00	17.00	7.00	953.00
1976	41.00	16.00	7.00	911.00
1977	42.00	16.00	7.00	918.00
1978	62.00	17.00	12.00	788.00
1979	39.00	14.00	12.00	761.00
1980	93.40	—	22.00	869.70
1981	119.20	34.00	27.30	1 100.80
1982	180.20	45.80	81.50	1 245.60
1983	189.60	63.90	123.40	1 326.40
1984	233.40	68.70	99.50	1 569.80
1985	265.80	68.70	12.50	1 447.90
1986	—	73.00	—	908.00
1987	—	70.00	—	1 060.00
1988	NA	78.20	NA	1 094.00
1965–69	97.10	10.60	36.90	2 731.50
1970–74	131.00	83.00	47.00	3 524.00
1975–79	223.00	80.00	45.00	4 331.00
1980–84	815.90	212.40	353.70	6 112.40
1985–88	265.80	289.90	12.50	4 509.90
1965–88	1 267.00	675.90	482.50	20 943.00

Source: Data adapted from ACDA (1990).

Appendix. North America — military spending (millions, 1978 constant US dollars).

Year	Canada	United States	North America
1965	3 353.60	103 751.40	107 105.00
1966	3 410.20	123 725.70	127 135.90
1967	3 650.70	142 263.00	145 913.70
1968	3 466.80	146 574.00	150 040.80
1969	3 268.70	140 826.00	144 094.70
1970	3 417.00	128 844.00	132 261.00
1971	3 428.00	117 882.00	121 310.00
1972	3 426.00	117 415.00	120 841.00
1973	3 371.00	112 094.00	115 465.00
1974	3 473.00	112 280.00	115 753.00
1975	3 427.00	108 493.00	111 920.00
1976	3 589.00	103 303.00	106 892.00
1977	3 850.00	108 036.00	111 886.00
1978	4 087.00	108 357.00	112 444.00
1979	3 834.00	112 349.00	116 183.00
1980	3 891.30	115 297.00	119 188.30
1981	4 023.80	124 087.60	128 111.40
1982	4 438.10	134 789.20	139 227.30
1983	4 459.60	143 516.10	147 975.70
1984	4 994.00	151 032.70	156 026.70
1985	5 314.70	157 721.20	163 035.90
1986	5 567.00	169 999.00	175 566.00
1987	5 672.00	173 573.00	179 245.00
1988	5 676.30	173 337.50	179 013.80
1965–69	17 149.80	657 140.10	674 289.90
1970–74	17 115.00	588 515.00	605 630.00
1975–79	18 787.00	540 538.00	559 325.00
1980–84	21 806.90	668 722.60	690 529.50
1985–88	22 230.00	674 630.70	696 860.70
1965–88	97 088.70	3 129 546.40	3 226 635.00

Source: Data adapted from ACDA (1990).

Appendix. South America — military spending (millions, 1978 constant US dollars).

Year	Argentina	Bolivia	Brazil	Chile	Columbia	Ecuador
1965	869.10	53.40	1 292.10	217.80	182.50	57.30
1966	980.20	50.30	1 483.00	256.10	187.70	55.30
1967	926.60	50.30	1 628.20	236.90	173.80	49.60
1968	942.50	47.10	1 594.40	252.60	187.70	51.50
1969	45.60	50.30	1 773.50	249.10	172.10	68.70
1970	984.00	49.00	1 460.00	318.00	205.00	76.00
1971	771.00	50.00	1 556.00	327.00	376.00	79.00
1972	729.00	60.00	1 657.00	392.00	203.00	104.00
1973	859.00	50.00	1 843.00	439.00	205.00	99.00
1974	1 051.00	62.00	1 820.00	811.00	184.00	115.00
1975	1 438.00	82.00	1 765.00	574.00	228.00	141.00
1976	1 464.00	84.00	2 110.00	254.00	187.00	144.00
1977	1 643.00	79.00	2 023.00	335.00	153.00	191.00
1978	1 793.00	80.00	2 042.00	417.00	167.00	163.00
1979	1 713.00	79.00	1 580.00	413.00	199.00	142.00
1980	2 532.30	105.00	1 465.90	625.00	270.70	177.50
1981	2 447.30	125.30	1 449.00	684.60	261.30	183.60
1982	3 912.70	62.90	1 951.00	634.90	314.90	164.50
1983	2 852.90	44.20	1 755.50	629.50	347.50	134.50
1984	2 344.00	69.30	1 749.20	655.70	382.20	131.70
1985	978.60	86.40	2 363.20	664.70	313.40	158.80
1986	1 310.00	97.00	3 567.00	599.00	303.00	207.00
1987	928.00	99.00	1 969.00	699.00	330.00	212.00
1988	1 906.50	142.50	851.60	782.10	562.20	158.80
1965–69	4 748.10	300.30	9 231.20	1 530.50	1 108.80	358.50
1970–74	5 832.00	353.00	10 101.00	2 861.00	1 401.00	614.00
1975–79	10 583.30	509.00	10 985.90	2 618.00	1 204.70	958.50
1980–84	16 099.40	406.70	10 733.90	3 894.40	1 890.10	791.80
1985–88	5 123.10	424.80	8 750.80	2 744.80	1 508.70	736.60
1965–88	42 385.90	1 993.90	49 802.80	13 648.70	7 113.30	3 459.30

Source: Data adapted from ACDA (1990).

Appendix. South America — military spending (millions, 1978 constant US dollars) (continued).

Year	Paraguay	Peru	Uruguay	Venezuela	South America
1965	16.40	212.50	74.10	370.00	3 345.10
1966	18.00	205.40	61.50	376.90	3 674.30
1967	24.60	274.20	74.10	426.60	3 864.90
1968	24.60	313.40	61.50	407.70	3 883.10
1969	24.60	268.30	75.60	399.10	3 126.90
1970	25.00	263.00	83.00	462.00	3 925.00
1971	24.00	275.00	111.00	582.00	4 151.00
1972	25.00	283.00	95.00	538.00	4 086.00
1973	22.00	338.00	98.00	555.00	4 508.00
1974	22.00	346.00	110.00	606.00	5 127.00
1975	28.00	466.00	107.00	658.00	5 487.00
1976	29.00	545.00	117.00	635.00	5 569.00
1977	32.00	796.00	118.00	676.00	6 046.00
1978	33.00	591.00	109.00	643.00	6 038.00
1979	33.00	449.00	115.00	522.00	5 245.00
1980	45.30	619.30	160.70	498.90	6 500.60
1981	52.90	555.60	218.70	447.20	6 425.50
1982	60.40	610.10	204.20	660.00	8 575.70
1983	81.80	553.70	152.50	544.00	7 096.10
1984	54.80	842.90	124.30	555.80	6 909.90
1985	39.70	823.90	118.00	488.60	6 035.30
1986	—	882.00	121.00	597.00	7 683.00
1987	37.00	732.00	—	1 375.00	6 381.00
1988	54.60	NA	110.50	565.70	5 134.30
1965–69	133.20	1 536.70	429.70	2 442.30	21 819.40
1970–74	146.00	1 971.00	604.00	3 401.00	27 284.00
1975–79	200.30	3 466.30	726.70	3 632.90	34 885.60
1980–84	334.80	4 005.50	978.40	3 194.50	42 329.50
1985–88	131.20	2 437.90	349.50	3 026.20	25 233.60
1965–88	945.60	10 979.50	3 088.20	15 697.00	138 134.80

Source: Data adapted from ACDA (1990).

Appendix. Asia — Military spending (millions, 1978 constant US dollars).

Year	Afghanistan	China	India	Indonesia	Japan	North Korea	South Korea
1965	38.70	12 048.70	2 592.60	474.60	3 486.00	574.50	477.20
1966	40.90	13 579.80	2 352.30	259.90	3 745.00	559.10	565.40
1967	43.00	13 100.50	2 301.70	562.70	3 984.00	727.80	606.00
1968	47.30	13 446.70	2 478.80	739.00	4 342.60	907.10	708.60
1969	49.50	16 775.00	2 516.70	829.40	4 780.80	872.90	816.00
1970	47.00	32 933.00	2 606.00	915.00	5 153.00	954.00	814.00
1971	43.00	34 012.00	3 149.00	1 034.00	5 747.00	1 193.00	1 031.00
1972	51.00	34 027.00	3 064.00	1 105.00	6 427.00	1 550.00	1 132.00
1973	56.00	35 048.00	2 626.00	1 026.00	6 841.00	1 550.00	995.00
1974	51.00	35 027.00	2 808.00	1 087.00	7 321.00	1 789.00	1 283.00
1975	64.00	33 998.00	3 396.00	1 511.00	7 628.00	1 482.00	1 587.00
1976	89.00	35 980.00	3 296.00	1 479.00	7 913.00	1 481.00	2 233.00
1977	71.00	35 004.00	3 251.00	1 533.00	8 385.00	1 341.00	2 512.00
1978	75.00	35 000.00	3 495.00	1 510.00	8 851.00	1 310.00	2 971.00
1979	227.40	38 497.00	3 420.00	1 937.00	9 748.00	1 208.00	2 838.00
1980	222.20	48 430.50	4 123.30	1 761.80	9 884.30	3 011.70	2 949.30
1981	191.60	47 204.40	4 521.10	1 982.10	10 344.30	3 297.10	3 211.50
1982	160.10	47 613.10	5 032.30	2 000.80	10 971.50	3 393.00	3 365.70
1983	196.80	47 531.30	5 370.90	1 792.40	11 618.70	3 479.90	3 486.50
1984	251.00	48 737.00	5 773.60	1 802.60	12 305.60	3 560.00	3 523.00
1985	—	49 247.90	5 967.60	1 798.40	13 022.40	3 582.60	3 767.00
1986	—	38 965.00	5 893.00	1 856.00	13 340.00	3 447.00	4 050.00
1987	—	38 965.00	6 511.00	1 588.00	14 057.00	3 457.00	4 146.00
1988	NA	39 382.80	6 598.40	1 449.00	14 930.30	2 328.60	4 148.80
1965–69	219.40	68 950.70	12 242.00	2 865.50	20 338.30	3 641.30	3 173.10
1970–74	248.00	171 047.00	14 253.00	5 167.00	31 489.00	7 036.00	5 255.00
1975–79	526.40	178 479.00	16 858.00	7 970.00	42 525.00	6 822.00	12 141.00
1980–84	1 021.70	239 516.30	24 821.30	9 339.80	55 124.40	16 741.80	16 536.00
1985–88	NA	166 560.70	24 970.00	6 691.40	55 349.80	12 815.20	16 111.80
1965–88	2 015.50	824 553.70	93 144.30	32 033.70	204 826.50	47 056.30	53 216.90

Source: Data adapted from ACDA (1990).

Appendix. Asia — military spending (millions, 1978 constant US dollars) (continued).

Year	Malaysia	Nepal	Pakistan	Philippine	Sri Lanka	Thailand	Asia
1965	216.90	7.80	548.40	153.10	11.60	193.40	20 823.40
1966	273.90	5.20	403.80	144.60	12.40	200.30	22 142.60
1967	264.40	7.80	377.30	170.10	12.40	240.10	22 397.80
1968	242.20	7.80	420.40	193.90	13.30	297.00	23 844.50
1969	239.10	7.80	425.90	210.90	13.30	354.00	27 891.10
1970	268.00	7.00	762.00	161.00	13.00	407.00	45 040.00
1971	287.00	8.00	844.00	169.00	25.00	502.00	48 044.00
1972	496.00	8.00	899.00	240.00	22.00	503.00	49 524.00
1973	430.00	9.00	950.00	302.00	17.00	443.00	50 293.00
1974	505.00	9.00	857.00	369.00	16.00	445.00	51 567.00
1975	576.00	8.00	955.00	623.00	16.00	476.00	52 320.00
1976	541.00	11.00	997.00	662.00	14.00	570.00	55 266.00
1977	599.00	14.00	909.00	636.00	15.00	668.00	54 938.00
1978	677.00	13.00	976.00	474.00	19.00	717.00	56 088.00
1979	620.00	15.00	980.00	447.00	21.00	843.00	60 801.40
1980	780.70	15.50	1 072.90	521.80	8.20	1 022.50	73 804.60
1981	1 146.90	17.10	1 165.60	507.40	15.70	1 017.20	74 621.90
1982	1 190.20	17.10	1 301.90	470.00	13.80	1 134.10	76 663.50
1983	1 063.00	20.90	1 606.60	463.20	10.70	1 142.50	77 783.40
1984	849.80	23.30	1 596.90	322.90	10.00	1 224.30	79 980.30
1985	831.70	24.00	1 858.10	329.70	10.00	1 401.60	81 841.10
1986	950.00	—	2 101.00	320.00	93.00	1 348.00	72 363.00
1987	752.00	27.00	2 237.00	364.00	120.00	1 314.00	73 538.00
1988	710.40	26.90	2 462.90	503.60	194.60	1 274.80	74 011.10
1965–69	1 236.50	36.40	2 175.80	872.50	63.00	1 284.90	117 099.40
1970–74	1 986.00	41.00	4 312.00	1 241.00	93.00	2 300.00	244 468.00
1975–79	3 013.00	61.00	4 817.00	2 842.00	85.00	3 274.00	279 413.40
1980–84	5 030.60	93.80	6 743.90	2 285.30	58.30	5 540.50	382 853.60
1985–88	3 244.10	77.90	8 659.00	1 517.30	417.60	5 338.40	301 753.20
1965–88	14 510.10	310.20	26 707.60	8 758.10	716.90	17 737.80	1 323 572.20

Source: Data adapted from ACDA (1990).

Appendix. Eastern Europe — military spending (millions, 1978 constant US dollars.

Year	Bulgaria	Czecho-slovakia	East Germany	Hungary	Romania	USSR	Yugo-slavia	Eastern Europe
1965	1 823.10	4 772.40	3 447.60	1 881.50	3 119.80	103 822.80	1 199.40	120 066.60
1966	1 832.50	4 751.90	3 523.80	1 768.90	3 039.30	106 667.30	1 212.70	122 796.40
1967	1 838.20	4 977.30	3 752.40	1 714.50	2 817.90	110 933.90	1 256.30	127 290.50
1968	1 826.90	5 018.20	4 647.60	1 823.30	2 898.40	116 622.90	1 440.40	134 277.60
1969	1 879.60	4 977.30	4 876.20	1 926.20	3 200.30	119 467.30	1 465.10	137 791.90
1970	1 936.00	4 031.00	5 007.00	2 052.00	3 156.00	127 762.00	1 031.00	144 975.00
1971	2 059.00	4 366.00	5 127.00	2 037.00	3 121.00	130 224.00	931.00	147 865.00
1972	2 209.00	4 479.00	5 293.00	2 035.00	3 472.00	134 445.00	1 032.00	152 965.00
1973	2 380.00	4 676.00	5 622.00	2 062.00	3 451.00	140 478.00	1 228.00	159 897.00
1974	2 597.00	4 700.00	5 698.00	2 156.00	3 600.00	147 169.00	1 713.00	167 633.00
1975	2 558.00	4 871.00	5 940.00	2 119.00	3 693.00	151 381.00	1 952.00	172 514.00
1976	2 649.00	4 767.00	6 088.00	1 951.00	3 868.00	158 225.00	2 033.00	179 581.00
1977	2 674.00	4 795.00	6 125.00	1 895.00	3 806.00	159 927.00	2 230.00	181 452.00
1978	2 559.00	4 897.00	6 276.00	1 990.00	3 816.00	161 600.00	2 284.00	183 422.00
1979	2 529.00	4 763.00	6 292.00	1 892.00	3 672.00	166 669.00	2 664.00	188 481.00
1980	2 434.10	5 440.70	6 692.10	2 004.40	4 075.40	156 788.60	2 587.30	180 022.40
1981	2 477.50	5 534.80	6 893.10	2 019.50	3 990.70	157 285.10	2 496.30	180 697.10
1982	2 765.70	5 958.70	7 333.20	2 025.00	4 517.30	158 464.50	2 264.90	183 329.20
1983	2 775.00	6 059.20	7 584.80	1 986.30	4 594.30	160 947.30	2 136.80	186 083.60
1984	2 784.90	6 084.90	7 768.20	1 954.80	4 526.80	163 864.50	2 223.60	189 207.70
1985	2 791.10	6 175.80	8 024.90	2 072.10	4 534.40	165 416.30	2 256.60	191 271.40
1986	3 679.00	7 276.00	8 666.00	2 511.00	5 864.00	169 587.00	2 497.00	200 080.00
1987	3 721.00	7 523.00	8 996.00	2 511.00	5 981.00	173 013.00	1 357.00	203 102.00
1988	4 532.30	7 857.70	10 005.30	3 046.90	6 885.90	161 743.40	2 095.60	196 167.20
1965–69	9 200.30	24 497.10	20 247.60	9 114.40	15 075.50	557 514.20	6 573.90	642 222.90
1970–74	11 181.00	22 252.00	26 747.00	10 342.00	16 800.00	680 078.00	5 935.00	773 335.00
1975–79	12 969.00	24 093.00	30 721.00	9 847.00	18 855.00	797 802.00	11 163.00	905 450.00
1980–84	13 237.20	29 078.20	36 271.40	9 990.00	21 704.50	797 349.90	11 708.90	919 340.00
1985–88	14 723.50	28 832.60	35 692.20	10 141.10	23 265.40	669 759.60	8 206.20	790 620.60
1965–88	61 311.00	128 752.90	149 679.10	49 434.40	95 700.40	3 502 503.70	43 587.00	4 030 968.50

Source: Data adapted from ACDA (1990).

Appendix. Western Europe — military spending (millions, 1978 constant US dollars).

Year	Austria	Belgium	Denmark	Finland	France	West Germany
1965	399.40	1 858.80	1 024.90	359.20	13 677.40	17 804.80
1966	454.30	1 883.30	1 008.30	350.10	14 031.80	17 472.00
1967	465.30	1 964.60	1 034.20	342.80	14 756.80	18 304.00
1968	467.20	2 059.00	1 139.60	386.40	14 740.70	16 224.00
1969	480.00	2 059.00	1 102.60	350.10	13 886.80	17 472.00
1970	472.00	2 170.00	1 047.00	395.00	14 450.00	17 204.0
1971	450.00	2 239.00	1 124.00	418.00	14 597.00	18 004.00
1972	475.00	2 344.00	1 092.00	441.00	14 960.00	19 246.00
1973	484.00	2 451.00	1 036.00	475.00	15 448.00	20 169.00
1974	540.00	2 493.00	1 161.00	455.00	15 739.00	21 080.00
1975	599.00	2 720.00	1 237.00	523.00	16 198.00	20 829.00
1976	627.00	2 894.00	1 232.00	503.00	16 882.00	20 887.00
1977	649.00	2 980.00	1 260.00	426.00	17 710.00	20 783.00
1978	721.00	3 175.00	1 314.00	463.00	18 623.00	21 417.00
1979	737.00	3 258.00	1 352.00	526.00	19 270.00	21 773.00
1980	717.60	3 382.60	1 403.20	608.30	19 882.80	22 345.70
1981	713.50	3 494.90	1 439.60	572.20	20 661.30	23 065.70
1982	796.20	3 429.40	1 465.70	626.70	21 313.50	22 917.20
1983	877.90	3 333.10	1 461.20	714.00	21 260.90	23 122.90
1984	877.90	3 218.20	1 433.90	647.70	21 260.90	23 008.60
1985	834.20	3 127.20	1 399.70	674.50	21 208.30	23 042.90
1986	916.00	3 317.00	1 346.00	731.00	20 915.00	22 749.00
1987	846.00	3 297.00	1 404.00	—	21 629.00	22 662.00
1988	804.60	3 138.10	1 437.90	812.70	22 006.90	22 507.50
1965–69	2 266.20	9 824.70	5 309.50	1 788.60	71 093.40	87 276.80
1970–74	2 421.00	11 697.00	5 460.00	2 184.00	75 194.00	95 703.00
1975–79	3 333.00	15 027.00	6 395.00	2 441.00	88 683.00	105 689.00
1980–84	3 983.00	16 858.20	7 203.50	3 168.90	104 379.40	114 460.00
1985–88	3 400.80	12 879.30	5 587.70	2 218.20	85 759.20	90 961.40
1965–88	15 404.00	66 286.30	29 955.70	11 800.70	425 109.10	494 090.20

Source: Data adapted from ACDA (1990).

Appendix. Western Europe — military spending (millions, 1978 constant US dollars) (continued).

Year	Greece	Ireland	Italy	Norway	Nether-lands	Portugal
1965	523.30	98.00	5 139.20	842.70	3 068.70	610.70
1966	576.80	96.40	5 574.40	831.00	2 972.20	642.00
1967	735.70	91.70	5 490.70	859.40	3 281.00	803.90
1968	853.10	94.90	5 574.40	917.90	3 242.40	885.70
1969	967.10	94.90	5 390.30	964.70	3 435.40	830.70
1970	1 007.00	98.00	5 178.00	965.00	3 446.00	873.00
1971	1 063.00	112.00	5 727.00	986.00	3 569.00	959.00
1972	1 124.00	117.00	6 292.00	1 006.00	3 627.00	975.00
1973	1 087.00	134.00	6 237.00	997.00	3 671.00	938.00
1974	1 085.00	142.00	6 278.00	1 003.00	3 849.00	1 184.00
1975	1 753.00	196.00	5 814.00	1 119.00	4 011.00	810.00
1976	1 680.00	177.00	5 727.00	1 164.00	3 964.00	659.00
1977	2 024.00	185.00	6 052.00	1 203.00	4 426.00	610.00
1978	2 071.00	195.00	6 246.00	1 307.00	4 227.00	622.00
1979	1 890.00	195.00	6 619.00	2 246.00	4 499.00	640.00
1980	1 886.70	216.80	6 864.10	1 283.20	4 186.00	736.10
1981	2 320.80	212.60	6 981.00	1 292.20	4 277.40	743.90
1982	2 296.00	253.30	7 385.60	1 356.50	4 257.60	748.30
1983	2 120.80	245.60	7 527.30	1 446.70	4 258.70	729.50
1984	2 486.80	242.20	7 753.60	1 388.60	4 379.80	693.20
1985	2 503.30	253.30	8 040.50	1 602.90	4 322.50	694.30
1986	2 213.00	238.00	6 851.00	1 667.00	4 368.00	792.00
1987	2 220.00	—	7 670.00	1 837.00	4 462.00	818.00
1988	2 387.20	225.70	8 531.30	2 936.50	4 517.90	833.50
1965–69	3 656.10	475.90	27 169.00	4 415.80	15 999.70	3 773.00
1970–74	5 366.00	603.00	29 712.00	4 957.00	18 162.00	4 929.00
1975–79	9 418.00	948.00	30 458.00	7 039.00	21 127.00	3 341.00
1980–84	11 111.10	1170.60	36 511.60	6 767.20	21 359.40	3 650.90
1985–88	9 323.40	717.00	31 092.80	8 043.50	17 670.40	3 137.80
1965–88	38 874.60	3914.40	154 943.50	31 222.40	94 318.50	18 831.70

Source: Data adapted from ACDA (1990).

Appendix. Western Europe — military spending (millions, 1978 constant US dollars) (continued).

Year	Spain	Sweden	Switzer-land	Turkey	United Kingdom	Western Europe
1965	2 045.10	2 529.30	1 815.70	1 146.00	1 3694.70	66 637.70
1966	2 630.00	2 662.40	1 910.40	1 126.00	1 3461.80	67 683.10
1967	3 050.80	2 629.10	1 850.30	1 216.90	1 3761.30	70 638.50
1968	3 492.60	2 579.20	1 741.70	1 315.10	1 3561.60	69 275.50
1969	3 408.50	2 595.80	1 854.90	1 306.00	1 2696.30	68 895.20
1970	3 158.00	2 817.00	1 782.00	1 343.00	1 2401.00	68 806.00
1971	3 286.00	2 866.00	1 810.00	1 545.00	1 3064.00	71 819.00
1972	3 457.00	2 924.00	1 791.00	1 559.00	1 4018.00	75 448.00
1973	3 389.00	2 927.00	1 745.00	1 565.00	1 4159.00	76 912.00
1974	3 510.00	2 973.00	1 785.00	1 580.00	1 4568.00	79 425.00
1975	3 642.00	2 928.00	1 677.00	2 594.00	1 4230.00	80 880.00
1976	3 400.00	2 907.00	1 764.00	3 010.00	1 4757.00	82 234.00
1977	2 491.00	2 894.00	1 800.00	2 949.00	1 4415.00	82 857.00
1978	2 475.00	2 950.00	1 759.00	2 727.00	1 4618.00	84 910.00
1979	2 652.00	3 011.00	1 862.00	2 307.00	1 5139.00	87 976.00
1980	2 810.60	2 808.80	2 030.90	2 262.10	1 5513.60	88 939.10
1981	2 980.40	2 853.00	2 027.80	2 687.60	1 4676.50	91 000.30
1982	3 166.50	2 940.30	2 085.60	3 005.90	1 5544.30	93 588.40
1983	3 326.20	2 960.80	2 112.50	2 897.20	1 7041.90	95 437.20
1984	3 540.50	2 912.60	2 193.10	2 798.80	1 7372.20	96 208.50
1985	3 107.90	2 917.70	2 246.80	2 993.10	1 8009.60	96 978.70
1986	3 664.00	2 854.00	2 408.00	3 421.00	1 7516.00	95 966.00
1987	4 137.00	2 895.00	2 202.00	3 312.00	1 7401.00	96 792.00
1988	3 901.70	2 969.20	2 192.40	3 092.60	1 6256.00	98 551.80
1965–69	14 627.00	12 995.80	9 173.00	6 110.00	67 175.70	343 130.10
1970–74	16 800.00	14 507.00	8 913.00	7 592.00	68 210.00	372 410.00
1975–79	14 660.00	14 690.00	8 862.00	13 587.00	73 159.00	418 857.00
1980–84	15 824.20	14 475.60	10 449.80	13 651.60	80 148.50	465 173.50
1985–88	14 810.60	11 635.90	9 049.10	12 818.70	69 182.60	388 288.40
1965–88	76 721.80	68 304.30	46 447.00	53 759.30	357 875.80	1 987 859.10

Source: Data adapted from ACDA (1990).

Appendix. Middle East — military spending (millions, 1978 constant US dollars).

Year	Cyprus	Egypt	Iran	Iraq	Israel	Jordan
1965	13.00	731.40	1 174.50	864.80	503.20	92.10
1966	11.00	570.20	1 320.40	815.80	603.80	82.80
1967	12.00	526.30	1 801.80	742.10	943.30	102.60
1968	10.00	693.00	2 171.40	1 003.80	1 176.80	150.40
1969	9.00	934.20	2 626.10	1 294.20	1 556.50	171.40
1970	14.00	1 161.00	3 465.00	1 264.00	2 346.00	132.00
1971	17.00	1 201.00	4 037.00	1 244.00	2 352.00	220.00
1972	17.00	1 466.00	4 789.00	1 280.00	2 046.00	250.00
1973	15.00	1 444.00	5 447.00	1 733.00	4 121.00	234.00
1974	25.00	1 873.00	8 432.00	2 047.00	3 385.00	218.00
1975	23.00	2 164.00	10 557.00	1 925.00	3 908.00	205.00
1976	25.00	1 571.00	11 047.00	1 983.00	3 943.00	205.00
1977	28.00	1 846.00	9 592.00	2 099.00	3 850.00	272.00
1978	24.00	1 922.00	10 996.00	1 984.00	3 317.00	290.00
1979	28.00	1 717.00	—	2 550.00	4 341.00	333.00
1980	26.00	1 638.30	4 942.00	7 171.40	4 499.80	824.00
1981	38.00	1 982.20	4 972.60	8 128.90	3 812.20	826.90
1982	35.00	3 340.00	5 258.70	7 776.90	3 485.20	760.10
1983	35.00	3 437.30	4 422.80	7 382.60	3 853.90	597.80
1984	34.00	28 565.70	5 951.00	7 471.80	4 266.80	691.20
1985	26.30	6 699.40	2 979.00	5 055.40	2 358.80	685.30
1986	18.00	2 448.00	—	—	3 446.00	498.00
1987	22.00	2 395.00	—	—	3 106.00	479.00
1988	25.60	2 156.70	0.00	0.00	2 745.00	696.10
1965–69	55.00	3 455.00	9 094.20	4 720.70	4 783.60	599.30
1970–74	88.00	7 145.00	26 170.00	7 568.00	14 250.00	1 054.00
1975–79	128.00	9 220.00	42 192.00	10 541.00	19 359.00	1 305.00
1980–84	168.00	38 963.40	25 547.00	37 931.60	19 917.90	3 700.00
1985–88	91.90	13 699.10	2 979.00	5 055.40	11 655.80	2 358.50
1965–88	530.90	72 482.50	105 982.20	65 816.70	69 966.20	9 016.80

Source: Data adapted from ACDA (1990).

Appendix. Middle East — military spending (millions, 1978 constant US dollars) (continued).

Year	Kuwait	Lebanon	Saudi Arabia	Syria	North Yemen	Middle East
1965	108.40	54.10	142.00	576.40	12.10	4 271.90
1966	119.20	61.50	172.00	480.30	12.10	4 249.00
1967	190.70	67.70	347.00	511.60	24.20	5 269.40
1968	210.20	71.40	216.00	391.00	33.20	6 127.20
1969	229.70	75.10	250.00	435.70	39.20	7 621.10
1970	337.00	75.00	2 534.00	511.00	47.00	11 886.00
1971	588.00	76.00	2 560.00	434.00	52.00	12 781.00
1972	605.00	79.00	3 306.00	468.00	52.00	14 358.00
1973	463.00	85.00	4 135.00	803.00	54.00	18 534.00
1974	556.00	122.00	4 300.00	672.00	72.00	21 702.00
1975	813.00	112.00	8 255.00	1 150.00	96.00	29 208.00
1976	1 045.00	115.00	10 233.00	1 138.00	110.00	31 415.00
1977	776.00	114.00	9 361.00	1 096.00	129.00	29 163.00
1978	1 080.00	—	10 096.00	1 210.00	143.00	31 062.00
1979	906.00	—	13 240.00	1 975.00	318.00	25 408.00
1980	746.30	101.60	20 220.00	1 636.40	275.30	42 081.10
1981	655.10	84.20	22 650.00	1 510.70	355.10	45 015.80
1982	803.40	73.40	25 480.00	1 671.40	451.00	49 135.00
1983	966.50	117.10	27 620.00	2 357.10	449.50	51 239.50
1984	952.40	106.60	21 890.00	2 366.40	353.60	72 542.90
1985	984.60	92.40	18 085.80	2 388.80	300.90	39 656.70
1986	836.00	—	11 323.00	2 191.00	138.00	20 898.00
1987	786.00	—	6 651.00	1 487.00	—	14 926.00
1988	759.00	0.00	9 031.40	1 139.90	490.20	17 044.00
1965–69	858.30	329.80	1 127.00	2 395.00	120.80	27 538.70
1970–74	2 549.00	437.00	16 835.00	2 888.00	277.00	79 261.00
1975–79	4 620.00	341.00	51 185.00	6 569.00	796.00	146 256.00
1980–84	4 123.70	482.80	117 860.00	9 541.90	1 884.50	260 014.20
1985–88	3 365.60	92.40	45 091.20	7 206.70	929.10	92 524.70
1965–88	15 516.50	1 683.00	232 098.20	28 600.60	4 007.40	604 018.10

Source: Data adapted from ACDA (1990).

Appendix. Oceania — military spending (millions, 1978 constant US dollars).

	Australia	New Zealand	Oceania
1965	3 012.80	262.20	3 275.00
1966	3 415.80	291.80	3 707.60
1967	3 415.80	274.90	3 690.70
1968	3 281.50	260.80	3 542.20
1969	3 665.30	262.20	3 927.50
1970	2 944.00	283.00	3 227.00
1971	2 840.00	273.00	3 113.00
1972	2 776.00	266.00	3 042.00
1973	2 471.00	266.00	2 737.00
1974	2 261.00	300.00	2 561.00
1975	2 740.00	307.00	3 047.00
1976	2 899.00	282.00	3 181.00
1977	2 883.00	295.00	3 178.00
1978	2 976.00	314.00	3 290.00
1979	2 624.00	295.00	2 919.00
1980	3 142.30	361.00	3 503.30
1981	3 330.20	404.10	3 734.40
1982	3 524.00	417.30	3 941.20
1983	3 693.70	409.80	4 103.50
1984	3 830.30	412.60	4 242.90
1985	4 096.90	409.80	4 506.70
1986	3 615.00	425.00	4 040.00
1987	3 650.00	436.00	4 086.00
1988	3 940.60	461.30	4 401.90
1965–69	16 791.30	1 351.70	18 143.00
1970–74	13 292.00	1 388.00	14 680.00
1975–79	14 122.00	1 493.00	15 615.00
1980–84	17 520.50	2 004.80	19 525.30
1985–88	15 302.50	1 732.10	17 034.60
1965–88	77 028.20	7 969.60	84 997.80

Source: Data adapted from ACDA (1990).

Appendix. World — Military spending (millions, 1978 constant US dollars).

	Africa	Central America	North America	South America	Asia	Eastern Europe
1965	2 196.61	479.81	107 105.00	3 345.11	20 823.36	120 066.60
1966	2 430.20	539.04	127 135.90	3 674.34	22 142.59	122 796.40
1967	2 962.46	530.74	145 913.70	3 864.92	22 397.81	127 290.50
1968	3 485.04	552.88	150 040.80	3 883.09	23 844.53	134 277.60
1969	4 642.81	629.06	144 094.70	3 126.94	27 891.14	137 791.90
1970	4 703.00	626.00	132 261.00	3 925.00	45 040.00	144 975.00
1971	4 554.00	670.00	121 310.00	4 151.00	48 044.00	147 865.00
1972	5 142.00	728.00	120 841.00	4 086.00	49 524.00	152 965.00
1973	4 670.00	734.00	115 465.00	4 508.00	50 293.00	159 897.00
1974	4 909.00	766.00	115 753.00	5 127.00	51 567.00	167 633.00
1975	5 759.00	953.00	111 920.00	5 487.00	52 320.00	172 514.00
1976	6 926.00	911.00	106 892.00	5 569.00	55 266.00	179 581.00
1977	7 288.00	918.00	111 886.00	6 046.00	54 938.00	181 452.00
1978	7 130.00	788.00	112 444.00	6 038.00	56 088.00	183 422.00
1979	6 424.12	761.00	116 183.00	5 245.00	60 801.43	188 481.00
1980	7 621.07	869.71	119 188.30	6 500.59	73 804.56	180 022.40
1981	5 051.84	1 100.85	128 111.40	6 425.53	74 621.89	180 697.10
1982	7 287.12	1 245.63	139 227.30	8 575.72	76 663.48	183 329.20
1983	7 325.90	1 326.40	147 975.70	7 096.07	77 783.41	186 083.60
1984	7 590.36	1 569.80	156 026.70	6 909.92	79 980.26	189 207.70
1985	3 410.43	1 447.93	163 035.90	6 035.29	81 841.08	191 271.40
1986	5 657.00	908.00	175 566.00	7 683.00	72 363.00	200 080.00
1987	7 066.00	1 060.00	179 245.00	6 381.00	73 538.00	203 102.00
1988	5 582.66	1 093.98	179 013.80	5 134.35	74 011.13	196 167.20
1965–69	15 717.10	2 731.50	674 289.90	17 894.40	117 099.40	642 222.90
1970–74	23 978.00	3 524.00	605 630.00	21 797.00	244 468.00	773 335.00
1975–79	33 527.10	4 331.00	559 325.00	28 385.00	279 413.40	905 450.00
1980–84	34 876.30	6 112.40	690 529.50	35 507.80	382 853.60	919 340.30
1985–88	21 716.10	4 509.90	696 860.70	25 233.60	301 753.20	790 620.60
1965–88	129 814.60	21 208.80	322 6635.00	128 817.90	1 325 588.00	4 030 968.00

Source: Data adapted from ACDA (1990).

Appendix. Military spending (millions, 1978 constant US dollars) — World (continued)

	Western Europe	Middle East	Oceania	North	South	World
1965	66 637.75	4 271.94	3 275.00	300 570.30	27 630.80	328 201.10
1966	67 683.14	4 249.04	3 707.59	325 067.90	29 290.20	354 358.10
1967	70 638.52	5 269.36	3 690.67	351 517.30	31 041.30	382 558.60
1968	69 275.52	6 127.22	3 542.25	361 478.70	33 550.20	395 028.90
1969	68 895.21	7 621.11	3 927.46	359 490.00	39 130.30	398 620.30
1970	68 806.00	11 886.00	3 227.00	354 422.00	61 027.00	415 449.00
1971	71 819.00	12 781.00	3 113.00	349 854.00	64 453.00	414 307.00
1972	75 448.00	14 358.00	3 042.00	358 723.00	67 411.00	426 134.00
1973	76 912.00	18 534.00	2 737.00	361 852.00	71 898.00	433 750.00
1974	79 425.00	21 702.00	2 561.00	372 693.00	76 750.00	449 443.00
1975	80 880.00	29 208.00	3 047.00	375 989.00	86 099.00	462 088.00
1976	82 234.00	31 415.00	3 181.00	379 801.00	92 174.00	471 975.00
1977	82 857.00	29 163.00	3 178.00	387 758.00	89 968.00	477 726.00
1978	84 910.00	31 062.00	3 290.00	392 917.00	92 255.00	485 172.00
1979	87 976.00	25 408.00	2 919.00	405 307.00	88 891.50	494 198.50
1980	88 939.11	42 081.07	3 503.28	401 537.40	120 992.70	522 530.10
1981	91 000.29	45 015.78	3 734.37	413 887.50	121 871.60	535 759.00
1982	93 588.43	49 134.96	3 941.25	431 057.70	131 935.40	562 993.10
1983	95 437.23	51 239.49	4 103.48	445 218.70	133 152.60	578 371.30
1984	96 208.46	72 542.88	4 242.92	457 991.40	156 287.60	614 279.00
1985	92 362.05	32 060.37	4 506.72	464 198.40	111 772.60	575 971.10
1986	95 966.00	20 898.00	4 040.00	488 992.00	94 169.00	583 161.00
1987	96 792.00	14 926.00	4 086.00	497 282.00	88 914.00	586 196.00
1988	98 551.79	17 044.00	4 401.86	493 065.00	87 935.80	581 000.70
1965–69	343 130.10	27 538.70	18 143.00	1 698 124.20	160 642.80	1 858 767.00
1970–74	372 410.00	79 261.00	14 680.00	1 797 544.00	341 539.00	2 139 083.00
1975–79	418 857.00	146 256.00	15 615.00	1 941 772.00	449 387.50	2 391 159.50
1980–84	465 173.50	260 014.20	19 525.30	2 149 692.60	664 239.90	2 813 932.50
1985–88	383 671.80	84 928.40	17 034.60	1 943 537.40	382 791.40	2 326 328.80
1965–88	1 983 242.00	588 657.20	84 997.80	9 530 670.30	1 998 601.00	11 529 271.00

Source: Data adapted from ACDA (1990).

Acronyms

ACDA	Arms Control and Disarmament Agency
AECA	Arms Export Control Agency
AIDS	Acquired Immune Deficiency Syndrome
AWACS	Airborne Warning and Control System
CATT	Conventional Arms Transfer Talks
CCSBMDE	Conference on Confidence and Security Building Measures and Disarmament in Europe
CFE	Conventional Armed Forces in Europe — formerly CAFE
CIA	US Central Intelligence Agency
CIIPS	Canadian Institute of International Peace and Security
CIS	Commonwealth of Independent States
CPSU	Communist Party of the Soviet Union
CRS	Congressional Research Service
CSCE	Conference on Security and Cooperation in Europe
CSIS	Canadian Security Intelligence Service
DSAA	Defense Security Assistance Agency
EEC	European Economic Community
FAA	Federal Aviation Administration
FLQ	Front de Libération du Québec
FMS	Foreign Military Sales
FOFA	Follow-on Forces Attack
GNP	Gross National Product
IAEA	International Atomic Energy Agency
IFP	Institut français de polémologie
IISS	International Institute for Strategic Studies
IMF	International Monetary Fund
INF	Intermediate Nuclear Forces
IRA	Irish Republican Army
ITAR	International Traffic in Arms Regulations
MPs	Members of Parliament

MTCR	Missile Technology Control Regime
NATO	North Atlantic Treaty Organization
NPT	Nonproliferation Treaty
OECD	Organisation for Economic Co-operation and Development
OMC	Office of Munitions Control
ORAE	Operational Research and Analysis Establishment
PLO	Palestine Liberation Organization
RCMP	Royal Canadian Mounted Police
SIPRI	Stockholm International Peace Research Institute
START	Strategic Arms Reduction Talks
TREVI	Terrorisme, Radicalisme et Violence International police network
USDS	United States Department of State

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